

ON THE

REVISED SETTLEMENT

OF

THE GOOJRAWALA DISTRICT

IN THE

LAHORE DIVISION,

EFFECTED BY J. H. MORRIS, Esq., C.S.



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ON THE
REVISED SETTLEMENT
OF THE
GOOJRAWALA DISTRICT, LAHORE DIVISION,
EFFECTED BY J. H. MORRIS, Esq., C.S.

No. 141, dated Lahore, 10th February 1860

From—A. A. ROBERTS, Esq., Offg. Financial Commissioner, Punjab
To—The Secretary to Government, Punjab

I HAVE the honor to submit the Report on the Regular Settlement of the Goojranwala District, as forwarded to me by the Commissioner with this letter No. 15, of the 23rd ultimo, which also accompanies, with annexures as per margin, all in original.

2.—The late Mr. R. Greathead demarcated the village boundaries of the district in 1850. The other officers who have had a hand in the settlement have been Messrs. Temple and Morris, assisted at various times by Lieutenant Elphinstone, and by Extra Assistants Mehtab Singh, Faizul Hossain, and Devi Ditta, the last of whom has, I regret to say, recently died.

3.—It would be superfluous for me to try to add anything to the very full resumé of Mr. Morris' work which has been submitted by the Commissioner. Mr. Morris' report evinces much ability, research, and knowledge of the country and people. He has entered minutely into the details of the trade, the resources, the physical and historical characteristics of the tract under review; and has adverted specially to the peculiarities presented by the Bar, and the difficulties which the nomadic nature of the people, and their remarkable distaste to fixed assessments, threw in the way of the Settlement Officers.

4.—A considerable delay has taken place in the submission of this Report. It reached the Commissioner's Office towards the close of the incumbency of my predecessor; but I did not consider it advisable to forward it during the early period of my own stay, and before I left the Division it had become evident that the assessments were, in many cases, too high, and therefore to report the settlement for confirmation was not possible. It cannot be denied that, notwithstanding a reduction by Mr. Morris of 17 per cent. on the summary settlement, the assessment generally was too heavy, and it has required considerable modification. But I would draw the particular attention of the Hon'ble the Lieutenant-Governor to the very full, and, to my mind, satisfactory, explanation which Mr. Temple has given, in his para. 18, of the reasons which induced this apparent severity. I think that now sufficient remedy has been applied. A reduction of Rs. 25,679, or nearly 4 per cent. more, has been given; and I concur with the Commissioner in believing that relief has been afforded wherever it was obviously required; and, as the settlement has now run out more than half of its term, I recommend that it be confirmed for the remainder of the ten years for which it was concluded, leaving it to the District Officer to propose further reduction should occasion require.

The jumma to which sanction is requested is Rs. 4,48,878,* falling at the rate

* This is the Khalsá jumma. Besides this, there is jumma of Rs. 94,484 on the jagheer land.

+ These rates have been calculated on the Khalsá area only.

of Re. 0-4-1⁺ per acre on cultivation,
of Re. 0-10-7⁺ on malgoozarie, and
of 0-4-10⁺ on total area.

5. I have already expressed my opinion as to Mr. Morris' ability and care. I cordially approve of the commendation bestowed upon him by the Commissioner, and, with reference to the animadversions which have been pronounced upon certain transfers of proprietary rights which were carried out by him, I consider Mr. Temple's defence of him, as given in paragraph 20 of his letter, both just and generous. Mr. Morris had great impediments to overcome, and met with much

opposition from the people. A large amount of firmness on his part was imperatively necessary, and his proceedings received the support of the superior authorities before whom they came. I would therefore claim for him, and for the other officers mentioned by the Commissioner,—*viz.*, Lieutenant Elphinstone, and Extra Assistants Mehtab Singh and Faizul Hossain,—the acknowledgments and commendation of Government.

No. 15, dated Lahore, 23rd January 1860

From—R. TEMPLE, Esq., Commissioner and Superintendent, Lahore Division
To—The Financial Commissioner for the Punjab

I HAVE the honor to submit for final sanction the Settlement Report of the Goojranwala District made by Mr. J. H. Morris. The report includes the Shurrupore and Shahdurah Purgunnahs, which, as they pertain to Lahore, have been already alluded to in my report on the settlement of that district. This report was originally prepared by the Settlement Officer towards the close of 1856. During the year which followed, 1857, political troubles prevented a matter of this kind from receiving immediate attention. During 1858 it became apparent that in various places the assessment would require reduction, and that various arrangements regarding the proprietorship of land must be modified. These matters were vigorously taken up by the Commissioner who immediately preceded me, Mr. R. N. Cust. During the year just closed—that is during my own incumbency—the above measures have been brought to final completion, and now after this experience, believing that the settlement works well, I have to solicit that it may receive the confirmation of Government.

2.—It will, I think, be found that Mr. Morris' report is ably and clearly drawn up. I need not follow him through all the points he has explained. It will suffice that, observing the order of his subjects, I advert to such points as require notice.

3.—To Mr. Morris' description of the district I would add that this part of the Rechna Doab has many associations in connexion with the Sikh régime. Goojranwala always enjoyed some political consideration. It was the birthplace of Sardar Maha Sing, father of Maharaja Runjeet Sing. The samadh (or tomb where the ashes are deposited) of the Sardar is to be seen here. Here too was the residence of the Nulwa family, of which the famous Sikh General, Heera Sing Nulwa, was the most conspicuous member. This family joined the rebel side in 1848-49, and possessing a tolerably fortified position here, was able to offer some resistance. The rebels were, however, overpowered, and this family fell into obscurity until 1857, when Jowahir Sing, son of the great Huri Sing, was sent down to fight on our side before Delhi. After gallant services both there and in Oude, he has returned to his native place with honor. The samadh of Huri Singh is kept up at Goojranwala. At Akalgurb, near Ramnuggur, there are the residences and gardens of a clan of Khutrees, once very influential and still rich. Many of them were employed in posts of administrative trust under the Sikh régime, and the most eminent man of the family, Dewan Sawan Mull, of Mooltan, is so well known as to require no notice here. This place was the home of the rebel, Dewan Mool Raj (now dead), and his young son is still there. There is also another important family of Khutrees at Eminabad (near Goojranwala); the principal member, Dewan Joala Sehaee, is Prime Minister to the Maharaja of Jummoo. Another member, Dewan Huri Chund, commanded the Jummoo Contingent on our side before Delhi, and died there. Sardar Goordut Sing, Mulwaiee, a man of some influence, also resides at Eminabad. I should also mention the family of Sardar Jhunda Sing, of Bootala, near Goojranwala, which possessed both wealth and influence. The Sardar is now the most influential man in the district. Also I would notice the family of Jodh Singh and Man Singh, the former of whom is employed as Extra Assistant at Umritsur, where he possesses some influence, and the latter has done military service during 1857. Raa Mool Sing, Chief Agent to the Raja Tej Sing, is a jagheerdar in this district.

4.—In his 5th para. Mr. Morris adverts to the Deg stream. The projected measures for the improvement of the stream have been mentioned in my report on the Lahore settlement. I have only to add that doubts are now entertained of the feasibility of one plan mentioned by Mr. Morris,—namely, the introduction of water into this stream from the Ravee.

5.—I beg attention to the matter of wool trade adverted to in Mr. Morris' 8th para. The export of this article is increasing. The iron-working at Nizanabad, mentioned in the same para., has now almost ceased. During 1857 it was found necessary to take precautions against arms being illicitly manufactured there.

6.—The water traffic mentioned in para. 9 is increasing, and boats are made at Wuzeerabad.

7.—I would add that Ramnuggur, once the emporium of the salt trade, is now decayed and almost deserted as a mart.

8.—In paras. 13 and 14 Mr. Morris gives a good description of the two main divisions into which the district is divided—*i. e.*, the "Des," or inhabited portion, and the "Bar," or jungle, comparatively uninhabited. He adverts to the time, perhaps 200 years ago, when the Bar was said to have a well to every 12 acres, and to the many remains and traces there are still to be found of that period, many of which I have myself seen. On the edge of this Bar, at Shekoopoorah, there are very interesting ruins of a hunting seat of the Imperial times, and a sort of tower whence the royal visitor might shoot deer. At the same place also there is a fort

and palace built by the Ranee Nekaen (wife of Maharaja Runjeet Sing), who held for some time this part of the district in jagheer. This is a lofty mass of masonry visible for many miles round. Something more might have been said about the value of the Bar for camels, which form the principal means of carriage in the Punjab, and vast herds of these animals are turned loose every rainy season to feed in the Bar.

9. The remarks in paras. 16 and 17 are worthy of attention. There is no district which stands more in need of *regular and moderate* rain. If the rain is scanty, as sometimes happens, not only does the cultivation suffer, but the cattle, which are essential to the carrying on of artificial irrigation, rapidly perish. If the rains are very abundant, as also happens sometimes, then the unirrigated lands glut the market with produce very cheaply produced, and equal to that raised with great cost and labour on the irrigated lands; and the latter cannot bear up against the competition thus created.

10.—I beg attention to an important circumstance, which accounts for much that is peculiar in the agriculturists of the district, and for much of the trouble which has been experienced in making the settlement. In para. 23 Mr. Morris states that the majority of the villages were founded during the reign of Runjeet Sing, or less than 50 years ago. Prior to this, the present cultivators or their ancestors were graziers, leading a nomad life, and tending their herds in the wide extended waste. Hence it has been that the people have often failed to evince much feeling for proprietary and hereditary rights, and have been ready to abandon them on the slightest adverse pressure.

11.—The account given of well irrigation in paras. 26 to 29 is valuable, and gives an idea of the great amount of labor and capital required to work the wells in this district. This circumstance should also be borne in mind, as it has added much to the difficulties of the settlement.

12.—The remarks in Mr. Morris' para. 33 of the importance of turnips as fodder for cattle deserve attention. Few things can be of greater consequence in this district than the culture of turnips. If the cattle do not get good food, they cannot work the wells; and if the well irrigation suffer, the district would be half ruined.

13.—The fact given in para. 34, regarding the original supply of bullocks for this district from the Derajat beyond the Indus, is interesting. Recently the establishment of a large annual cattle fair at Eminabad has proved very beneficial.

14.—The allotment of waste land in absolute proprietorship round the villages within the Bar, alluded to in Mr. Morris' 37th para., has proved liberal. The unallotted waste which remained has been distributed into a number of Government estates. These are preserved or leased out to farmers. The inhabitants of the Bar have often expressed a wish to obtain these leases for themselves. If they shall offer terms as good as those of the other farmers, they may have the preference; but they can have no absolute claim, as a liberal amount of waste has already been assigned to them, within the limits of which Government exercise no interference.

15.—The field measurement adverted to in Mr. Morris' paras. 40 to 42 was conducted by the village Putwarrees. These men were appointed by the Settlement Officer, and belonged to the district, though not generally to the particular villages wherein they were employed. The measure proved here, as elsewhere, beneficial, because it caused men of the country to be employed instead of Ameens from Hindoostan, and because it trained up for the subsequent working of the settlement a body of men who could not otherwise have been obtained. But I do not think it saved much expense to Government, for the cost of training and supervising these men was great, and their work at first proved very defective, and had often to be done over and over again before it attained complete accuracy.

16.—The demoralizing effect on the people produced by the Sikh system of collecting in kind by a system of division or appraisal of the crop is forcibly pointed out in Mr. Morris' paras. 45 to 47. In no district was this rude system more universal than in this, and I believe that this was one of the causes which gave rise to trouble in making this settlement. When the settlement first began, the people were found to be unthrifty, unskilful, and altogether helpless.

17.—At the conclusion of his 51st para., Mr. Morris speaks of the "absence of proprietary rights, and the low value of landed property." This may appear a strong statement; but after some acquaintance with these people, both then and since, I believe that the statement was quite correct in reference to the time when the settlement was in progress. But I hope that so unfortunate a circumstance has by this time been greatly mitigated, and will soon altogether cease to exist.

18.—In paras. 52 to 62 Mr. Morris describes his data for assessment. As the method was one prescribed by myself, I shall not say more about it, except to observe that the data were various, and obtained from many sources. Among other things, it is to be observed that out of the estimated amount of gross produce, only one-fifth and one-sixth were assumed as the Government demand. This shows that the Settlement Officer at least aimed at fixing a moderate assessment. But it is obvious to remark that these produce estimates formed only one out of many modes of calculation. There was one calculation made upon classification of soils; another on the number of ploughs; another on the number of yokes of oxen; another on the average collection of former years. After all this, a general rate was fixed. In determining this latter, much weight was given to those *general and practical considerations* without which the best and

most elaborate calculations may prove fallacious; and I am bound to state that Mr. Morris, while paying due regard to the interests of the State, did sincerely endeavour to show consideration to the people. The assessment of the Goojranwala and Ramunggur sub-divisions was made by Mr. Morris under my supervision, and the jummas of the villages were sanctioned by me. Mr. Morris having proceeded on sick leave to the hills, I myself announced these jummas in the summer of 1853. This assessment made a considerable abatement on the former revenue. But at that time prices of agricultural produce were in a transition state, difficulties were gathering round the agriculturists, and it was soon found that still further relief must be given. The assessment of the Hafizabad and Shekoopoorah sub-divisions was made by Mr. Morris independently of me. The Summary Settlement, though believed to be moderate at the time, and fixed at a deduction of ten per cent. on the average collections of five previous years, had yet proved severe under the altered circumstances of the agriculturists. The regular assessment now made by Mr. Morris gave a further reduction of 17 per cent. Herein the intention certainly was to make a really moderate settlement, and the rate at which it fell—namely, one rupee two annas on the cultivated acre, with three-fourths of the cultivation artificially irrigated—is light as compared with those which prevail in highly cultivated districts. The best part of the irrigated tract forms part of the well known “Churkuree Mehal” (so called from the “Churkur” or Persian wheel by which the wells are worked). But although in these lands the soil is strong and the crops fine, still the water is deep below the surface, the masonry and wooden machinery expensive, the labor of men and bullocks is excessive day and night, the wear and tear of cattle is great, and whenever their fodder is poor, as is too often the case, they sicken or die, and then the irrigation is brought to a stand-still. This of itself renders such estates unable to bear a high assessment. Then there is the liability to unequal competition in some seasons with the produce of unirrigated lands already mentioned. Then, the husbandman is not well remunerated, after all this expenditure of labor and capital, unless his produce fetches a tolerably good price. Thus the general fall of prices throughout the Punjab peculiarly affected a district like this. Then, as already explained, the people were utterly careless and improvident; unaccustomed to the exercise of proprietary rights, and strangers to those habits of management which the possession of such rights would induce. Furthermore, unfavourable circumstances in the seasons had rendered money assessments distasteful to the people. When I announced the jummas in 1853, I could see that in their hearts the people were unwilling to enter into any engagements at all for cash payments. All these considerations rendered the Settlement Officer anxious to fix a low assessment. Still, although Mr. Morris believed, and with apparent reason, when he made his final report, that the assessment was light, further experience proved that in some estates scattered over the district pressure still existed. Time after time, as the collections came to be made, here and there estates would show signs of distress. The masonry of a well would fall in, and the owner could not repair it; the machinery would break, and he could not mend it; the oxen would die, and he could not replace them; a co-partner would die, and his place could not be filled; a tenant would quit, and a successor could not be found. Sometimes a man would dispose of his property in land in a manner which showed that he regarded it as worth less than nothing,—as a burden to be got rid of rather than as a possession to be cherished. The recurrence of these cases after a settlement which certainly appeared moderate was very discouraging. Still there was nothing for it but to give relief in every case of proved distress. My predecessor commenced enquiring in these cases, which I have had followed up. I have sanctioned reductions in nearly all of them, and Extra Assistants Mehtab Sing and Faizul Hossain (both versed in settlement) visited in person each village where any distress was alleged. It seldom happened that a whole estate was distressed, but only a portion. The abatement ordered was made therefore from the quota of revenue charged on that particular portion. Most of the reductions were granted in the winter of 1858-59, on detailed recommendations submitted through the Deputy Commissioner, Captain Elliott. I marched through the district in the spring of 1859, and saw many of the people; not a single complaint of over-assessment was made, and those whom I asked expressed themselves satisfied. The change in the temper of the people since the time when the settlement was in progress seemed remarkable. Before making this report, I have caused Extra Assistant Faizul Hossain to make one more tour of inspection, and I have sanctioned the Deputy Commissioner's proposals for reduction in 24 more estates. Captain Elliott now reports that there are no more estates requiring reduction. I trust that this may prove to be the case, but I cannot but feel some apprehension, inasmuch as while I am writing this another season of drought is occurring. However, I trust that if any more cases of distress become apparent, they will be special and temporary. If any more reductions should be needed after the submission of this report, they will require the sanction of Government. Very recently I met a large body of zemindars of the district to consult about indirect taxes. They seemed well-to-do and contented. I was struck with the improvement in their appearance within the last few years. The reduction since the Settlement Report of the Settlement Officer amounts to Rupees 25,679 on 264 estates. The assessed revenue does not now probably amount to more than one-fourth in most cases, and never to more than one-third of the gross produce of the land.

19.—Most of the progressive jummas mentioned in Mr. Morris' 63rd para. have been given up,—that is, the assessment has been maintained at the sum assessed for the first year without any augmentation being subsequently demanded.

20.—In para. 63 Mr. Morris adverts to some transfers which have occasioned much correspondence. Various forms and transfers of proprietary right were effected; the transfers sometimes affecting whole estates and sometimes portions of estates. In most cases the original proprietors remained on the land as cultivators, paying rent in kind to the new proprietor. Regard-

ing the farms, which were ordered because the proprietors refused to engage for the Government revenue, there was no positive illegality, and they were at the time officially sanctioned. But afterwards, as it was considered that the assessment in these cases was too high, an opportunity was given to the proprietors of recovering their position, provided the farmer could be induced to surrender his right. This was generally arranged in an amicable manner. The farmers were seldom very anxious to retain their hold on the land, and only desired to receive compensation for any expenditure they might have incurred, and this was arranged by the restored proprietors. But the "transfers" were somewhat different. They were not indeed made to enforce the acceptance of the assessed jumma. They occurred after the usual engagements had been entered into by the proprietors. The proprietors had indeed voluntarily given in a written renunciation of their rights. The Settlement Officer at first tried to induce them not to resign; when they persisted, he at last allowed them to resign, and sought for other persons to engage for the revenue. Such resignation, however, was in reality caused by poverty, or by the pressure of the assessment, or by the prospect of balances accruing which the proprietors felt they could not pay. So that in reality these transactions were not essentially different from sales or transfers for realization of Government demand, without, however, the maintenance of those forms which check the inconsiderate exercise of the power of sale and transfer,—a power which, however well exercised, must always be serious in its effects. Obviously, the effecting of such transfers through the agency and machinery of the Settlement Office was not legal. There are processes which the Settlement Officer is by law empowered to use in the event of proprietors refusing to engage for the assessed revenue, but sale is not among those processes. In point of fact, however, these resignations were not technically refusals to engage. The people had once engaged in the usual form, therefore the Settlement Officer might have left them to be dealt with by the Collector according to law. As to the policy, the result has shewn subsequently that when the assessment is so reduced as to render land really valuable, the people even in this district do never wish to resign their rights, and that when they become tolerably well-to-do, they are content, and cease to agitate for reduction. My own personal experience points to this conclusion. Still the difficulties with which Mr. Morris had to contend were great. No officer who had not seen these people from 1853 to 1855 would believe how provoking and contumacious they sometimes were; some of them would even assemble in numbers and almost behave like a mob. Sometimes a circle of villages would combine to offer passive resistance to the progress of the settlement. Sometimes proprietors would desert their land, believing that no other occupant would be forthcoming, and that they would ultimately be readmitted on reduced terms. Sometimes they would say that they would renounce their proprietorship rather than engage for any fixed assessment. And in this, as in all their other proceedings, *they shewed a strong tendency to combine*. Such behaviour, *after the announcement of an assessment which reduced their burden by nearly one-fifth*, induced the supposition that, the more relief was granted, the more clamorous would they become for further relief. The fact is, they had not then learnt to appreciate, as they now do, the advantages of a fixed money assessment, and were anxious to revert to the old system of collection; and, considering the real difficulties which at that time beset agriculturists, and the past history and character of the people, this is not much to be wondered at. Thus it arose that Mr. Morris had, as he says, to search for fresh proprietors. Such a search was not indeed regular, but it was not without excuse. And there can be no doubt that firmness was at that time needed in dealing with these people. These cases were taken up by Mr. Cust in 1858, and reported to the Financial Commissioner and Chief Commissioner, who decided that they must be cancelled. The property was to be restored to the proprietors; and on restoring the property to the proprietors, the transferees were to have such compensation as might be practicable. This has been arranged in the same manner as in former cases; most of these readjustments were effected in Mr. Cust's time, and some in my own. No case of this kind now remains pending. The people do, I believe, appreciate the just and liberal spirit which Government has shewn in causing these restorations (one or two of the more remarkable cases I have heard cited as instances of British justice); while at the same time they have had their lesson, and remember that concession is not always made to contumacy, and that the fiscal interests of the State are not to be trifled with. Viewing, therefore, the peculiar difficulties with which Mr. Morris had to contend, I trust that these particular cases may not be allowed to detract from the general credit to which he is entitled for the settlement.

21.—In his paras. 67 to 69, Mr. Morris gives some interesting details regarding inams. To this I shall only add that I have submitted a proposal to grant small inam allowances to Chowdrees, or leading men among the landholders. In this, as in other districts, I think that these men form an useful institution, and supply a link between the officers of Government and the mass of the agricultural community.

22.—From his 71st para. onwards, Mr. Morris treats of the record of rights. He gives many details which will, I think, shew that great pains were taken to make the people comprehend their rights and liabilities. The importance of this process in civilizing such a community as this cannot be over estimated. I believe that its effects, combined with the moderate assessment now fixed, on the character of the people have proved excellent.

23.—What Mr. Morris states in his 72nd para. regarding the weakening of the ties of joint responsibility in the communities is quite correct. But the people will understand this better as the effect of the settlement is felt. And the extent to which ancestral shares were recognized in the distribution of the assessment, both in respect to whole estates and to particular wells, gives ground for entertaining this hope. Also the statement in para. 73, regarding the apathy of the people, who had been accustomed to do nothing for themselves, but to leave everything to their head men, is quite correct. But I do not altogether concur in Mr. Morris' infer-

ence that the settlement was premature because it transferred power from the head men, who had alone been accustomed to exercise it, to men who little knew how to use it. It surely is of immense consequence to teach every man to manage his own property. Because he does this in a proper independent spirit, it does not follow that the head man should not have plenty of legitimate influence, and plenty of scope for shewing superior qualities. Our system has given the head men an assured and good position. The Government looks to them for much, and the more their just position is recognised, and the responsibility therefrom arising is enforced, the better.

24.—It will be observed that about half the villages have distributed their revenue on wells. Hence the great importance of the well statement alluded to in para. 79. The preparation of this statement was advocated at the time by the Deputy Commissioner, Colonel Clarke.

25.—It will be seen from para. 82 that the disputes regarding proprietorship of land, though numerous enough, were not intricate or remarkable.

26.—The remarks at para. 83, regarding the absence practically of any distinction, save in name, between a cultivator and a proprietor, are quite correct. It may appear strange, but such is undoubtedly the fact in this part of the country. It is of course a proof of the little value of land. If, as we hope, the operation of the settlement shall create a value, then a distinction will gradually arise between the proprietors and cultivators, who may in *future* be inducted. The *present* cultivators will probably merge into proprietors.

27.—In reference to paras. 92 to 94, I would observe that since the settlement it has been necessary to rearrange the circles of the Putwarries or village accountants, so as to reduce the size of the beats, and thereby increase the efficiency of the accountants. To effect this, it has been necessary to enhance the percentage on the revenue demandable from the villagers on this score to 5, 7 and even 9 per cent. The cases, however, where the higher percentage has been imposed, are villages where the revenue has been lightly assessed, and where, in addition to their cultivation, the people possess pastoral resources nearly untaxed. The people have nowhere objected to the increase. The form and number of village statements to be rendered annually by the Putwarrees have been greatly abridged, chiefly on a plan formed by my predecessor, Mr. Cust. During the present year I have, through the exertions of the District Officer, succeeded in getting in the Putwarries' papers (for the year ending with the collections of June and July) by October. This promptitude will I hope lay the foundation of a good system. There are now a Canoongoe and one Deputy to each tehseel sub-division, so I hope that the supervision of the Putwarries' papers will be effective.

28.—The necessity anticipated by Mr. Morris in his paras. 99 and 102, of using severity towards defaulters, will not I trust arise. As yet it has been carefully avoided since the settlement.

29.—The remarks in para. 101, regarding the expediency of constantly enquiring into the conditions of the wells, are doubtless correct. Tuccavee advances are always given when applied for, to repair the wells; but I do not recommend that more than this should be attempted. As property becomes valuable, the people will surely learn to do this for themselves.

30.—In reference to paragraph 103, I have to observe that the plan of giving tuccavee advances to purchase yoke cattle, first suggested by Colonel Clarke in 1853, is still followed with very good effect.

31.—It will be observed from paragraph 105 that the cost of the settlement has been 32 per cent. on one year's revenue. This percentage, though considerable, will not appear excessive when it is remembered that this district is not a rich one. The cost of a settlement mainly depends on the extent of cultivation and the number of fields. If these fields pay a good revenue, then the percentage of cost on revenue will be small. If the fields pay little revenue (as in this district is often the case) the percentage of cost on revenue must inevitably be high.

32.—It remains to notice the services of the officers who served in the settlement. Mr. Morris himself devoted several years' arduous service to this settlement. Throughout he evinced much practical ability. He was constantly in the field and in the saddle. He knew his villages well. He acquired a good knowledge of the dialect, customs, and existing tenures of the agriculturists in this Doab. He bestowed great pains in rendering the work accurate and sound. I have the best possible means of knowing his merits, and can therefore confidently testify thereto. The result of his labours is already apparent in the improved condition of the district. Lieutenant Elphinstone served for six months in the settlement, and during that time rendered much assistance. Mr. Morris notices the industry, knowledge, and services of Extra Assistant Mehtab Sing. He also mentions very favorably Extra Assistant Devi Ditta. This Devi Ditta was a Kardar under the Sikh régime, and after annexation was made Tehseeldar of Hafizabad; in that capacity he was deputed to do duty with the Settlement Officer. He gave so much satisfaction, that he was made Extra Assistant. I believe that he was one of the best Sikh officials ever drafted into the British service. His integrity was well known, and his knowledge of the people and country was very great. His recent death has caused a great loss to the district. I also desire to mention the services of Extra Assistant Faizul Hossain. Though chiefly employed in other settlements, he was for some time engaged in this one also. He is an officer of considerable ability and thorough integrity, versed in settlement from the commencement. He is now posted to the district, and is of great use to the District Officer in working the settlement. I trust he may be permitted to remain there.

33.—I also desire to testify to the cordial and useful coöperation uniformly afforded to the settlement by the Deputy Commissioner. Lieutenant-Colonel Clarke. No clashing of opinion ever occurred between him and the Settlement Officer. The Deputy Commissioner lent his best Tehseeldar to the settlement, and referred all cases regarding the possession of land to that Department; and at all times Colonel Clarke's local knowledge enabled him to afford valuable counsel. I have to state also, that during the past two years the present Deputy Commissioner, Captain W. R. Elliott, has done much to secure the good working of the settlement, by causing careful enquiry to be made in those cases where distress has been alleged, and by having the Putwarie's papers accurately based on the settlement record.

34.—With these remarks, I submit this settlement for sanction. I recommend that this settlement be confirmed for ten years from the dates borne in the several engagements made with the people, with a proviso that, after the expiry of that period, Government should have the power of modifying the arrangements, or confirming them for such further period as may appear necessary. Though the settlement operations have been beset with many difficulties, success has been attained in the end. I believe few districts could be found in which the effects of a regular settlement have proved more beneficial. Having known these people when their temper and condition were very different, I can testify to the happy change which is now perceptible. Instead of being discontented and troublesome, they are now contented and industrious; proprietorship, instead of being a burden, is becoming to be considered a real and valuable possession. Instead of living from harvest to harvest, the people are learning to use the advantages which arise from the limitation of the public demand by a moderate cash assessment. Instead of taking no thought for the management of his own share, or leaving every thing to the head men, each copartner in an estate knows his rights, his possessions, and his liabilities. Measures such as these, by inducing forethought and self-government, must always be the prime agents of civilization among our rural population, and as the effects are more and more felt, so will the Goojranwala District advance in prosperity and contentment.

No. 100 of 1856, dated Goojranwala, the 31st October 1856

From—J. H. MORRIS, Esq., Settlement Officer, Goojranwala

To—The Commissioner and Superintendent, Lahore Division

I HAVE the honor herewith to submit the papers noted in the margin, of the settlement of the entire district of Goojranwala, together with the Trans-Ravee Purgunnah of Shahdurah, attached to the Lahore Tehseel, revised under Regulation IX of 1833. In addition to the regular prescribed statements, several others have been added, containing statistical information which will I trust prove useful.

Introduction.			
Nos. II, III and IV.	Mozehewar statoments bound up Thannahwar in 10 vols. }		
No. V.	Purgunnahwar acre statements in 3 covers.		
No. VI.	Annual Jumma statements.		
No. VII.	Tenure statement.		
Appendix I.	Remarks on the assessment of Purgunnah Shahdurah.		
" II.	Ditto	Ditto	Goojranwala
" III.	Ditto	Ditto	Itanungur
" IV.	Ditto	Ditto	Hafizabad,
" V.	Ditto	Ditto	Shekoopoorah
" VI.	Ditto	Ditto	of the Bar
" VII.	Remarks on the costs, with statement.		
" VIII.	Statement of deduced revenue rates, &c.		
" IX.	Averages and percentages of soil, cultivation, &c.		
" X.	Percentages of irrigation, soil, produce, &c.		
" XI.	Statement of total expenditure.		

2.—The settlement was originally commenced on by the late Mr. Greathead in 1850. Under him the demarcation of boundaries was effected in the Shahdurah Purgunnah, as also in one of the pur-

gunnahs of the Goojranwala District. The investigation of rent-free tenures also in the former purgunnah was partially accomplished. On Mr. Temple's assuming charge of the whole Rechna Doab settlement in 1851-52, the portion now under report was made over by him to me, then one of his assistants. Under his supervision nearly all the settlement operations were conducted by me up to February 1854, when, Mr. Temple having been promoted to a higher office, I obtained independent charge.

3.—During Mr. Temple's incumbency the work done was as follows:—The demarcation of boundaries was completed; the measurement of three out of five purgunnahs, and the assessment of the same finished; the rent-free tenures of two purgunnahs partially investigated; and much miscellaneous "hukeat" work done. On my assuming charge, there still remained the measurement and assessment of nearly two whole purgunnahs, together with the "Bar" villages; the investigation and report of nearly all the rent-free cases; the completion of the entire record of rights for the whole portion, together with much judicial and miscellaneous work. On this I have been engaged from the above date up to the present period.

4.—The portion of country now under report, comprising the entire district of Goojranwala, together with the purgunnah Shahdurah, may be described as a tract situated in the centre of the Rechna Doab, between the rivers Ravee and Chenab,—the former on the east, and the latter on the west. On the north lies the district of Sealkote with Purgunnah Narowal, Zillah Umritsur, whilst on the south it is bounded by the districts of Jhung and Gogairah, with

the "Bar" between them. Its extreme length is about 100 miles, and breadth 60 miles; its superficial area 4,254 square miles.

5.—It is traversed by only one stream, the Deg, a hill stream, which, taking its rise in the Jummo Hills, enters this district at the north-west corner of Purgunnah Shahdurah, and quits it again at the extreme south of Purgunnah Shekoopoorah,—its course being nearly parallel to that of the River Ravee. It is naturally a very fertilizing stream, leaving a fine rich deposit for growing first rate rice: in favorable seasons it floods the neighbouring country to the extent of nearly two miles on each side. This overflow however is very uncertain, being almost entirely dependent for its supply of water on the periodical rains. Having already addressed you on the project of providing a continuous supply of water from the Ravee to this stream, I will not now enlarge on the subject here, except to express my conviction that I consider it quite feasible, and one calculated to prove very beneficial to that portion of the district which is traversed by this stream.

6.—The principal roads are—the Grand Trunk Lahore and Peshawur road, entering at Shahdurah and leaving at Wuzeerabad, after passing through the city of Goojranwala: from this there are two branch roads at Kamokee, one leading to Sealkote, and the other, *viâ* Ramnuggur, to Pind Dadun Khan and the salt mines. Among minor roads may be mentioned the Shekoopoorah road, connecting Lahore and Shahpoor, and leading on to the Derajat and Trans-Indus territories; it passes through Kot Pindée Dass, Shekoopoorah and Pindée Bhutteean. The Mooltan road, from Wuzeerabad to Mooltan, running down nearly parallel to the River Chenab, through Ramnuggur, Pindée Bhutteean and Jhung, and connecting the north with the south portion of the Doab. The Umritsur road, from Goojranwala to Umritsur *viâ* Eminabad, being the direct line from Umritsur to Peshawur, thus avoiding the detour by Lahore. Among district roads may be mentioned the following:—from Goojranwala to Sealkote; from Wuzeerabad to Sealkote; from Goojranwala to Shekoopoorah; and from Goojranwala to Hafizabad; also a projected line from Ramnuggur to Shurrukpoor, *viâ* Hafizabad and Shekoopoorah.

7.—The chief towns are—*Shahdurah*, close to Lahore, on the banks of the Ravee; *Goojranwala* on the Grand Trunk Road; *Wuzeerabad* on the banks of the Chenab; *Eminabad* on the Umritsur road; *Ramnuggur* and *Pindée Bhutteean*, both within two or three miles of the Chenab, on the Mooltan Road; *Hafizabad* and *Shekoopoorah* on the borders of the "Bar;" and *Shurrukpoor*, close to the Ravee. All these are good and favorable markets for the disposal of surplus produce.

8.—This district is not noted for any particular trade; the following however are worthy of passing notice.

Ghee.—This is exported in very large quantities from the jungle tracts of the "Bar" to the cities of Lahore and Umritsur. The amount exported annually from this district cannot be worth less than a lakh of rupees. When the cattle are sent out into the "Bar" to graze, each large herd is accompanied by the agent of some shop-keeper or other; he advances money to the graziers, who in return let him have, every third or fourth day, the butter produced from the milk of their herds. This butter he manufactures into ghee, and sends off on mules or carts to the neighbouring large markets. This is a very remunerative trade, as may be imagined from the fact of traders being induced to advance money to graziers to ensure the product of their flocks. The ghee is generally sold at 25 per cent. above the cost of the butter.

Wool.—This also is produced in considerable quantities in the "Bar," and exported thence in boats down the Chenab to Mooltan, from whence it is sent on to Bombay. It also sometimes goes across to Ferozepoor and thence down the Sutlej. The average annual yield from one sheep is 1½ lb. It is usually cleaned before being exported. I have not succeeded in ascertaining the amount annually exported from this district.

Iron.—There is a small town called Nizamabad, in the vicinity of Wuzeerabad, famous for its workers in iron. During the Imperial and Sikh times they were chiefly employed in manufacturing warlike weapons; the trade has however greatly deteriorated of late years.

9.—The water carriage on the Chenab is rather insignificant: about 70 boats, of average tonnage of 400 maunds, leave this district for Mooltan, Sukkurgurh, &c. The principal exports are wool, sugar, oil, and flax; of late years wheat is also exported in small quantities. The imports are dates, various spices, and iron. The average annual of the exports is about half a lakh, and of the imports ten thousand rupees.

10.—The state of education cannot be said to be very flourishing in this district. I subjoin a statement, however, giving all the educational statistics, which I trust will prove interesting. In all cases where, under the former Government, land was declared rent-free for the support of schools, these grants have been upheld under the present settlement, and the various plots of land proposed for release.

Statement of Schools, Scholars, &c., in the Goojranwala District with Purgunnah Shahdurah.

No. of Mouzahs.			No. of Schools.						No. of Scholars.						Remuneration.		
With Schools.	Without Schools.	Total.	Arabic.	Persian.	Hindee.	Shashtree.	Goormookhee.	Total.	Arabic.	Persian.	Hindee.	Shashtree.	Goormookhee.	Total.	Cash.	Grain.	Land.
413	1,289	1,702	345	219	36	20	40	660	1,743	1,609	633	244	376	4,606	240	297	113

11.—A census of the whole Punjab having only lately been prepared, I have not thought it necessary to compile fresh returns, or elaborate new population statistics. I beg however to subjoin statements shewing those statistics most worthy of notice.

Census Statement of the Goojranwala District with Purgunnah Shahdurah.

Number of Mehals.	Population.			Number of Houses.	Area.					
	Men.	Women.	Total.		Cultivated in acres.	Uncultivated in acres.	Total in square miles.	Average No. of people to each mahal.	Average No. of people to each house.	Average No. of people to each square mile.
1,702	3,00,876	2,99,013	5,99,889	1,42,751	6,49,299	19,37,581	4,042	352	4 $\frac{1}{5}$	148

From the foregoing it will be seen that the total population of this tract is just six hundred thousand, whilst the average per square mile is less than 150 (one hundred and fifty). This may appear very low, but then it must be borne in mind that many of the villages in the south are mere hamlets in the "Bar," i. e., a few houses, the property of graziers, who pasture their cattle in the extensive areas now made over to them. I must not however omit to mention that the area of the purely *uninhabited* tracts of the "Bar" has not been included in the above statement. This amounts to 212 square miles, so that the total superficial area will not be less than 4,254 square miles.

12.—Before proceeding to notice more particularly the castes, soil, &c., prevalent in this tract, I will attempt a slight description of this district, with its resources, &c. For this purpose I would divide it off into two distinct portions—one the cultivated portion or "Des," and the other the grazing tract or "Bar." The former comprises the purgunnahs of Goojranwala, Ramnuggur and Shahdurah, with a portion of the Hafizabad and Shekooipoorah Purgunnahs, in short all the land lying to the north, with fringes of cultivation from 5 to 10 miles in length on the banks of the rivers to the south. The latter contains that large uncultivated tract which runs right athwart the Doab and down its centre.

13.—In their general aspect, productions and capabilities, these tracts differ greatly, as well as in the character and habits of the inhabitants. In the "Des" we find agriculturists of settled habits, with rights and property in the soil, and deriving their chief support from their cultivation; whilst the people of the "Bar" are graziers, leading a nomad life, possessing little or no landed property, and subsisting more on the profits derived from their cattle than their land. In the former we find the soil good, water near the surface, wells numerous, cultivation superior, agriculture thriving, proprietors fairly industrious, villages large, and population dense, in short a fine tract, with the natural resources fairly developed, and only requiring care and capital to be converted into a richly fertile and high revenue-paying country; whilst in the latter, the soil, though good, is hard and unyielding, requiring much irrigation to be rendered productive, the water very far from the surface, so that wells cannot be sunk without considerable expense, the wells few, the cultivation inferior, the villages small, and the population scanty.

14.—The "Des" or cultivated portion does not require any lengthened description here, as it will be treated of in detail hereafter. The "Bar" may be described as a flat, level tract, covered with rich grass, and thickly dotted over with bush jungle, consisting chiefly of the

"jund," "peelo," "kurreel," and "furrash" trees. In the upper part of the "Bar," adjoining the "Des," we find villages scattered here and there, distant two or three miles from each other, with wells and cultivated lands; but as we proceed southward, the number of villages diminish greatly, and very few are to be found south of the Lahore and Shalpoor road, the whole tract being one wide expanse of jungle. It is reported that this tract was densely populated and highly cultivated some centuries ago, before and during Akbur's reign, and up to the time of Arungzebe, when the saying is "that there was a well to every 12 acres of land;" since then it has gradually declined, and was nearly depopulated in the troublesome times that followed after. Traces of this former prosperity are to be everywhere met with in the shape of old mounds, broken down wells, and delapidated village sites.

15.—The general resources of this district may be thus classified,—agricultural produce from the "Des;" and the spontaneous products, as wood, grass, &c., together with the profits derivable from grazing, and milch kine, from the "Bar." There is no thriving trade to give an impetus to the growth of any particular sort of produce, nor is commerce so brisk as in any remarkable way to facilitate the sale of the products of the zemindar's lands. The district is not visited periodically, as some are, by merchants eager to buy up the sugarcane and other valuable crops. It is mainly dependent on its village bankers ("Shahs"), who advance money at exorbitant rates of interest to the cultivators, receiving in return the produce of their labor. Notwithstanding the many facilities which exist for exporting the surplus produce, and thus obtaining for it a better price, still, with the exception of the industrious Lobanahs, it is very rare to see any of the zemindars taking advantage of them. At present they are entirely in the hands of their "Shahs," who consequently reap all the profits.

16.—The resources of this tract are mainly dependent on *water*, i. e., irrigation, natural or artificial; land is useless without it. The effect of a really good rainy season is quite marvellous,—the aspect of the country is entirely changed. In the "Des" the amount of cultivated land on each well is nearly doubled, whilst in the "Bar" many thousands of acres of "baranee" land are brought under cultivation, and the country covered with rich grass, affording first rate pasturage for cattle. Notwithstanding that the district is essentially one artificially irrigated, still I am of opinion that there is none in the Punjab whose resources and productive powers are more dependent on the regular supply of the periodical rains. This has been most strikingly exemplified during the progress of this settlement. The rainy season of 1853-54 was very unfavorable; indeed it almost amounted to a regular drought. Its effects were most disastrous. Numberless wells were deserted; the "baranee" land remained uncultivated; the pasturage land of the "Bar" failed; the cattle died by hundreds; great scarcity prevailed; money payments become very unpopular; and the revenue was collected with the greatest difficulty. Again, on the other hand, the year 1855 has proved a favorable one, and the results have been most cheering. New wells have been built, the collections have been easy, and the people contented. To fully develop therefore the resources of this district, and render it less dependent on the variations of the periodical rains, it appears to me most advisable that every means should be taken to open out canals, and thus make the supply of water certain. The great desideratum is to render the supplies of irrigation certain and independent of the periodical rains; until this is done, the collection of the revenue, the working of the settlement, and the consequent development of the resources of the country, must remain a matter of doubt and uncertainty.

17.—Another point requiring notice, and which affects materially the resources and condition of this district, is the fall and rise in prices. In the "Des," and especially towards the north, the cultivation is superior, wells are good, the soil is well manured and irrigated, and the produce proportionally fine; consequently by artificial means a good crop is produced, though perhaps at considerable cost. In the south, however, and towards the "Bar," artificial means are much less used, whilst if the rains prove favorable, a first rate crop is grown at but little expense. The difference therefore between these two tracts is, that in the one the return is certain, but the expense great; in the other the return uncertain, but the expense trifling. Now in favorable rainy seasons, the returns being large, prices fall proportionally. These enhanced returns, however, come from the "baranee" chiefly; the irrigated land is indeed benefited, but in not nearly so great a proportion as the "baranee," whilst the original expense of cultivation, manure, irrigation, &c., have remained the same. Thus then an actual loss has often devolved on the cultivator, for on account of the great original outlay, a certain price must be yielded to afford him an average profit. As before stated then, canals must be introduced, or some means devised to render the irrigation and consequent out-turn in some measure certain, before the resources of this tract can be thoroughly developed, or the collection of the revenue rendered a matter of certainty.

18.—The prevailing castes are Jât, Mussulman, and Hindoo, sub-divided into numberless clans or "goths." In addition to them many Lobanahs and Raiens are to be met with in the river villages on the banks of the Ravee. Rajpoots are not in considerable numbers; the majority are to be found in the north of Purgunnah Shahdurali—they are all Mussulmans; Khutrees and Brahmins are not very often met with as cultivators, except in the large Qusbahs. A detailed account of each caste, with all the sub-divisions into clans or "goths," will be found in Appendix No. VII. As a general rule, in the "Des" the industrious classes may be said to prevail; with the exception of a few of the Raiens, Lobanahs and Hindoo Jâts, the people cannot be termed first-rate cultivators: neither on the other hand, with the exception of some of the Rajpoots, do they merit the designation of idle or bad malgoozars. In the "Bar," however, the character of the people as agriculturists does not stand high: they are generally

lazy, idle, much too addicted to thieving and cattle-lifting to follow with patience any other more peaceable or less exciting pursuit.

19.—The land of this Doab may be divided into two grand classes—the low and high lands, generally known by the following terms, “Netar” and “Ootar;”—the former signifying the land in the vicinity of the river, or in any way subject to its influence; and the latter the tract within this and towards the centre of the Doab. The “Netar” is again sub-divided into “Bet” and “Dhaya,” signifying respectively, that subject to inundation, and that free from it; whilst the Ootar is distinguished by a variety of terms according to its locality. Thus in the north and well cultivated tracts it is known as Bangur, Mera, Dcs, Churkurree Mehal, &c.; whilst in the south it is called “Baredge” (“Naka”) and “Bar.”

20.—The different varieties of soil chiefly known and recognized are—

Goera, an artificial soil, consisting of the best land of any soil, always highly manured, and worked to such a degree that its nature has become quite changed. It is always adjacent to towns or villages, or else consists of the finest land within the inner circle of the well. It is mostly found in the Khadir estates, or in those of the Churkurree Mehal; after that in the Bangur; and then in the adjoining Bar. There is very little in the “Bar.” Only the best crops are grown on it, as sugarcane, cotton, tobacco, and all other garden stuffs. Wheat is not often grown on it unless the sugarcane fails, when it follows as a reserve, the one being sown in *Phagoon*, and the other not till *Assoo*, or six months after.

Rohee, the finest natural soil, a stiff loam, breaks up into large clods. That known as “Chumb Rohee” is found in low land near streams and ponds; it answers to the “Muttior” of the Provinces, is dark in color, hard and unyielding, and consequently difficult to work. It is not manured, but requires much irrigation. In favorable rainy seasons it grows heavy crops of rice; gram also is much grown on it, as also wheat and gojee. It is never found in the Khadir; mostly met with in the Bangur and Deg chuks, the latter more especially. There are also some fine patches in the Churkurree Mehal, and a little in the “Bar.”

Doshahee, is the “Doomut” of Hindoostan: a clayey soil, generally of good quality, manured by cattle being folded on it; when manured, grows cotton, fine wheat, barley, joar, muklai, melons, &c. Without manure, produces the ordinary crops of barley, gojee, churree, moth, mash, &c. It is common all over the district.

Mera, a mixture of clay and sand (the “Roslee” of Hindoostan) of many varieties; some very good, and equal to the best “Doshahee,” others again very poor, and not much better than “Tibbah.” Its quality depends on the amount of sand in it. The more sand the poorer the soil. It is worth very little without manure and irrigation: grows all the ordinary crops. This and the preceding are the staple soils of the district.

Tibbah, nearly all sand (the “Bhoor” of the Provinces), worth very little; only grows the inferior crops of moth, mash, &c.

21.—To the above may be added the different varieties of land known as “Kullur,” “Kulluratee,” &c., which are almost useless, and will grow hardly any crop at all. They throw out an excess of alkaliescence, and are greatly impregnated with saltpetre, so that after a shower of rain the ground appears as if covered with a thick frost. The tracts in the district in which this most abounds are some 70 villages in Purgunnah Ramnuggur, and a strip of land running down through the Shurrukpoor Purgunnah, about three miles in breadth, and lying between the river villages and those situated in to vicinity of the Deg nuddee.

22.—There are also two other varieties of soil deserving of notice, *viz.* :—

Chumb, or low land, receiving the drainage from the neighbouring high land. During the rains and cold season water lies and a *jheel* is formed. On the borders of the Chumb land good Rohee soil is often found, growing fine rice; this variety is known as “Chumb Rohee.”

Bela, or the tract lying next to the river, not much above its level, generally new land, sometimes with fine alluvial soil, but often much injured by sand. It produces naturally fine grass, and affords fine pasturage to the villages in the vicinity. The jungle known as *jhow* abounds in this. The river villages of the Hafizabad and Shekoopoorah Purgunnahs have very fine “belas” attached to them: they often extend for miles, and form very valuable pasturage grounds. In years of drought all the upland villages send their cattle to these “belas” to graze.

23.—The cultivation of this district is by no means superior, and will not bear comparison with that of Sealkote or Goojrat. This may be attributed partly to the general inferiority of the soil, and partly to the idle habits and nomad character of the people. I do not mean to say that first-rate cultivation is not to be met with; on the contrary, in some of the Khadir and Churkurree Mehal villages, the soil is as highly manured, and the land as well cultivated as in any estates in the Punjab; but this is the exception. Such instances are rare, and generally speaking the cultivators are lazy and idle, and bear much more the character of graziers than agriculturists. Nor is this to be wondered at when we consider that the majority of the villages were founded during the reign of Runjeet Sing, or less than 50 years ago. Prior to this, the present cultivators or their ancestors were graziers, leading a nomad life, and tending their herds in the wide and extended tracts of the “Bar.”

24.—Irrigation is of two kinds, natural and artificial. The former comprises “Sylabee,” or lands submerged and kept moist by the rise of the river; and “Abee,” or low land, near a stream or pond, subject to an overflow from the same. The latter consists of “Chahee,” or

such as are watered from wells ; and " Abee," or land watered by a jalar from a stream or pond.

25.—The " Sylabee" land is by no means of first rate quality, and will not bear comparison with that higher up in the Doab, and still less with that of the " Jullundur Doab." Generally speaking the alluvial deposit from the Ravee is richer than that from the Chenab, which is a good deal injured by sand ; but the action of the former river being much greater than that of the latter, the Ravee estates suffer much more from abrasion than those of the Chenab.

26.—The " Chahee" land, and the whole subject of artificial irrigation from wells, forms such an important element in the agriculture of this Doab, that it will require to be treated at greater length than the natural irrigation. The well used for irrigation is the Persian wheel ; it is to be found in all soils from the Khadir to the " Bar." The cost of sinking a well ranges from 50 to 300 rupees, and is dependent greatly on the depth of the water from the surface. A first rate (Kamil) well has (40) forty acres attached to it, and should be worked by eight (8) pair of bullocks ; in general however there are not more than four (4) pair, except in the " Bar," where every good well has at least six (6) pair. The condition of a well is almost universally estimated by the number of yokes attached to it, and no well with less than four yokes is considered worth much.

27.—The arrangements for watering are dependent on the number of shares,—each share having a stated period allotted to it, called "varee." If there are only two or three shares in a well, then the "varee" will extend to eight watches—24 hours : if four shares and upwards, the period allotted to the "varee" is four watches or 12 hours. The "varee" of 12 hours is by far the most common, especially in the Churkurree Mehals adjoining Bar and " Bar" estates. In these there are generally 4 "varees;" in the Bangur often 6 ; whilst in the Khadir we find 8 and 10 "varees." In the Khadir one yoke of bullocks will work for two watches, consequently 2 yokes will work a "varee;" whilst in the " Bar" one yoke cannot work more than one watch, so that four yokes are required to work a "varee" of four watches.

28.—The amount of land irrigated by a well depends on the nature of the soil, depth of water from the surface, and condition of the well, but most of all on the number of yokes it is worked by. A " Kamil" well with 8 yokes, worked day and night, will irrigate 40 acres of land. This however cannot be reckoned on with certainty, and I should say 30 acres is the average in ordinary years ; whilst in years of scarcity or drought not more than 20 or 25 acres can be calculated on. In " Bar" land, one yoke is equal to irrigating 5 acres in the year, whilst in the Bangur and Khadir it reaches 7 or 8 acres. The soils of the Khadir and Bangur tracts however absorb more water than that of the " Bar." Buffaloes are mostly used in the " Bar" and " Nukka." They are also coming into use in the Bangur, but in the Khadir inferior bullocks can do the work. Buffaloes are superior in strength to bullocks, but cannot work in the sun so well. The expenses of irrigation are least in the Khadir, and greatest in the " Bar" ; in the latter, the water is often so far from the surface that it is by no means uncommon to see two yokes of buffaloes working together at one well.

29.—In " Rohee" land the rubbee crops preponderate, whilst in the " Myrah" the Khurreef have slightly the advantage. Generally speaking 40 acres will be thus classified : " Rubbee," 22 acres,—18 wheat, 2 barley, 2 gojee ; " Khurreef," 18 acres,—2 sugarcane, 2 cotton, 2 maize, 1 rice, 1 mustard, 4 joar, and 6 fodder for cattle. One great peculiarity, which cannot fail to strike one here, is, that nearly every crop, even down to fodder for cattle, is grown on irrigated soil, and requires artificial irrigation. The only crops not irrigated are gram, moth, and bajra. The crops regularly watered, and always requiring artificial irrigation, are as follows :—Rubbee, garden stuffs from 6 to 20 waterings ; wheat, barley, gojee 5 or 6 times, wheat generally getting one more watering than the others ; Khurreef, sugarcane 16 to 25 waterings ; cotton 5 or 6 ; maize 6 or 7 ; mustard, turnips, and carrots always irrigated more or less.

30.—Jalars are used like wells ; they are built on the bank of a stream or pond, the water being brought under by a cut. A jalar will irrigate from 25 to 30 acres on an average. For rice cultivation a "dhenklee" is sometimes used. Kutcha wells are also common in the Khadir.

31.—Of the spring crops the staple is wheat. It is grown in great abundance in this district, every well being cropped with it. It is sown from *Har* to *Assoo*, and almost invariably manured. It is generally sown broadcast, except in low " Sylabee" land, where it is sown with the drill. The finest wheat is grown in the Khadir and Churkurree Mehal. All the other ordinary spring crops, as barley, gram, gojee, melons, flax, mustard, and vegetables are grown. The first three preponderate. Of the autumn crops the staple is rice. It is grown in great abundance in all the Deg villages of the Shurrupore Tehseel ; also in the " Rohee" and Chumblands all over the district, as well as in all low lands in the vicinity of ponds and jheels. It is not manured ; it is generally of a coarse description : that grown from the Deg irrigation is of better quality, and obtains a ready sale in the Lahore markets. Sugarcane is extensively grown in the north of the district, mostly in the Churkurree Mehal, and in the Khadir villages of the Chenab ; but strange to say there is none to be found in the Ravee Khadir estates. The finest is to be found in the Oodowalce talooqua. This crop is always extensively manured, and the soil carefully prepared. It is grown in the best " Goera" soil close to the well. Though not a staple, still it ranks with wheat and rice as one of the revenue-paying crops of the district. The other ordinary " Khurreef" crops do not require separate notice.

32.—As fodder for cattle, turnips are much grown. They may be seen in many of the wells in the Ramnuggur and Hafizabad Purgunnahs, and in all the "Bar" villages. This crop is a very valuable one for cattle fodder, and its cultivation, as also that of churree and other rain crops, might be extended with great advantage. Indeed, in a district like this, where everything almost may be said to depend on the supply of cattle for irrigation, too many precautions cannot be taken for their preservation. I am of opinion that a portion of the land of each well, say one-eighth, should be set apart strictly for the growth of fodder. In years of scarcity the outcry has not been for food, or even for returns wherewith to pay the revenue, but for fodder to feed the cattle with. In the year 1853, during the severe drought, I have often seen the cattle being fed on the leaves of the "bher" (mulleh) bushes, chopped up and mixed with a little bhoosa. Under even the Sikh Government, all land cropped with fodder for cattle was regarded as exempt from the payment of revenue, and treated as "maafee" in the "Kunkoot." During the spring the cattle get green wheat; during the summer, "bhoosa;" in the rains, grass; in the autumn, "churree" and other crops; and in the cold season, turnips and "bhoosa."

33.—The ploughs are of very simple manufacture. Many were formerly made at Wuzerabad and Shahdurah, and sold at the Choukul Fair, but this sale has fallen off of late years. A pair of bullocks will plough from $\frac{1}{3}$ to $\frac{1}{2}$ acre per diem. The ordinary spring crops, as wheat, barley, &c., require from 4 to 8 ploughings; garden produce, vegetables, &c., from 5 to 10. Of the "Khurreef" crops, sugarcane takes some 16 ploughings; cotton, 4 to 6; the others, 3 or 4; rice is grown in beds and transplanted. Rotation of crops is not strictly carried out, but still attention is paid to it. One-fourth of the land of a well generally lies fallow. Manure is very generally used, but much wasted; great improvement might be effected in this. Liquid manure is not used; and, except in towns and cities, manure is not bought or sold. Of the "Rubbee" crops, garden produce is always manured, and wheat generally so—in "Dosahee" soil almost invariably by having cattle folded on it. Of the "Khurreef" crops, sugarcane, cotton and mukka are always manured.

34.—With the exception of the "Bar" and "Nukka" villages, the cattle chiefly employed in agriculture are bullocks. They are preferred to buffaloes for two reasons: first, they live much longer, and secondly, they can bear up better against the heat and fatigue. Buffaloes are stronger; but then they can only work at night during the hot months of *Jhet*, *Har* and *Sawun*. Formerly this district was chiefly supplied with bullocks by Syuds from the Derajat, Leia and Shahpoor Districts, who came up twice a year, in *Jhet* and *Sawun*, and sold large numbers to the zemindars. Either ready money was given, or short credit on the security of respectable Chowdrees, who gave written bonds for the amount due. The prices ranged from 15 to 30 rupces. Since the supply of bullocks failed, that is since 1909 and 1910 *Sumbut*, when the Syuds gave up coming, buffaloes have been imported, and are coming very generally into use. They are sold at a much lower rate than the bullocks. A few bullocks are still imported from the Shahpoor "Bar;" but the cattle of the "Bar" of this district are almost all bought up by the Lobanahs for the carrying trade.

35.—The adjustment of the district and tehseel boundaries need only be slightly noticed here, having already been fully dwelt on in my letter No. 18, dated 6th March 1855. By the old arrangement the Goojranwala District consisted of the four Tehseels of Goojranwala, Ramnuggur, Hafizabad and Shekoopoorah; whilst to the zillah of Lahore was attached the Trans-Ravee Purgunnah of Shahdurah. The new arrangement has been to divide the District of Goojranwala into three tehseels—Goojranwala, Wuzerabad, and Hafizabad, and to incorporate Shahdurah, with nearly all the southern portion of Shekoopoorah, into the new Tehseel of Shurrupoor, to be attached to the Lahore District. Each new tehseel will contain two purgunnahs, to each of which a Canoongoe has been appointed, who will regulate and superintend the preparation of the Putwarees' papers. All the Police jurisdictions have also been arranged in concert with the District Officers, it having been determined to give 7 thannahs to the Goojranwala Zillah, and 3 to the Shurrupoor Tehseel. In fixing the new boundaries it was found impossible to keep strictly intact the boundaries of the old talooquas, but still care was taken to disturb them as little as possible.

36.—The demarcation of village boundaries in Purgunnahs Shahdurah and Goojranwala was effected by the late Mr. Greathead. His system was an elaborate and expensive one. The remainder was accomplished by Mr. Temple, whose system was both cheap and easy of execution. It was this—the zemindars put up their own boundaries, and gave in two papers, one a "razeenamah," stating they were satisfied with the boundary, and the other a "moochulka," binding themselves down to abide by that which had been fixed. It was the duty of the putwaree to see that the pillars were made and rightly put up, as well as to draw out the thakbust maps. All disputes were settled by the Judicial Officer on the spot. I ought to mention that the new system of fixing village boundaries by the use of the compass and plane table was not in vogue when the hudbust of this district was effected. In addition to the regular village boundaries, pillars have also been fixed in all the river villages to show exactly the flood and alluvial lines, in accordance with the instructions issued by the Financial Commissioner. It is to be hoped that they will be carefully kept up and renewed each year when necessary.

37.—The demarcation of boundaries for the "Bar" villages was conducted on the principles laid down and enunciated in Appendix No VI. The system was Mr. Temple's, and I cannot do better than describe it in his words:—"The tract was divided into two parts, and to each was appointed a Sudder Moonserim. These two officers were again superintended by a Deputy Collector, or officer vested with judicial powers. The first step was the preparation of statistics for each village, of houses, population, cattle, and wells. This done, each village

was visited by the Sudder Moonscrib, who looked over the land under cultivation, and examined any old wells or ruined village sites, or other objects which the villagers might point out. He then would take the statistics just mentioned, and would calculate the number of acres the estate ought to have according to the rules promulgated by me. Then, if there should be any of the marks just quoted, he would measure the distance from the village, and allot the land so as to include them. He would also take care that the land allotted in any direction should not interfere with the boundary of any other estate. Having arranged all this in concert with the villagers, he would make some rough marks on the proposed boundary, together with a sketch, and forward the papers and lumberdars to the Judicial Officer, together with a detailed report describing minutely the village. If the lumberdars professed themselves satisfied with the allotment, and if the proceedings seemed in accordance with the rules, the papers would be sent to the Sudder Moonscrib, in order that he might permanently mark the boundaries, and prepare a regular thakbust map. In the allotment of the land, the areas were ascertained by measuring distances in steps. Areas thus measured can only be approximate, but they were quite accurate enough for present purposes, and wherever the professional survey has since disclosed a glaring error, a reallotment has been made."

38.—The marking off the purely jungle tracts of the "Bar" into separate blocks or chucks, and the future arrangements proposed for the conservancy and sale of the timber, preservation of the grass, and collection of grazing dues, have been so lately dwelt on at length by me in my letter No. 87, dated 14th June 1856, that I need not repeat what was then said. Suffice it to say that 27 new chucks have been formed, the property of Government, in which the wood and grass will be carefully preserved, and due precautions taken that the interests of Government do not suffer, as they have hitherto done, by the reckless waste and destruction of both timber and fodder.

39.—There are also some former rukhs, such as Muhadeo, Kothaluh, and others, worthy of notice. They appear to have been appropriated by the former Government, and used more for the preservation of game than any other purpose. Many villages were found within the boundaries of these rukhs. Thus in Rukh Muhadeo there were as many as twenty-two (22) villages, and the question arose as to how these were to be treated. At the summary settlement these villages were considered as having no pasturage land attached to them, and were all called on to pay a grazing tax for the right of grazing their cattle in the Government rukh. Now, according to our system, all villages have had a fair proportion of pasturage land allotted to them, without having been called on to pay for it; it therefore did not seem just to me that these villages should be called on to pay, and that too for the right of pasturage in land which must originally have belonged to them, before it was appropriated by the Sikh Government. I therefore ruled that every estate within the limits of the rukh, and without a separate area for pasturage, should have the right of grazing its cattle within the rukh without paying extra for it; whilst every precaution should be taken for the preservation of the timber, moonj, grass, &c., as well as for the collection of pasturage dues from the proprietors of all villages situated outside the rukh, but who might wish to graze their cattle within it.

40.—The measurement has been effected entirely through the agency of the Putwarries. The advantages and disadvantages attending this new system, together with the measures proposed and adopted for remedying existing defects, have already been fully discussed by me in my letter No. 51, dated 12th June 1855, and do not need repetition here. For the "Des" or well cultivated tract, the measurement papers prepared have been the same as those in vogue in the Provinces. The only one requiring particular notice is the "Shujreh" or field map, concerning the preparation of which by the Putwarries many doubts were originally entertained, it being thought that the skill required to make one of these maps accurately was beyond that possessed by any Punjabe Putwarrie. Before the measurements were commenced on, the Putwarries underwent a course of instruction for two or three months in all branches of the work, but more especially in the construction of these maps. The result has on the whole been satisfactory, the majority of the maps being correct, neat in appearance, and carefully made. As a rule the general result of the Putwarries' measurements as to the area, &c., have been satisfactory: it is in the minor details of soils, crops, &c., that there has been a failure. The great error has been the clubbing up of several fields into one; also slight discrepancies of area. Thus, one side common to two contiguous fields would be found in the Khusreh of two different lengths. A very careful potal, however, with remeasurement in all doubtful cases, has I trust remedied all defects; and I am sanguine that for all practical purposes the measurement will prove as accurate as need be.

41.—Remeasurement was found necessary in the whole Purgunnah of Goojranwala, both on account of the inaccuracy of the first measurement, and also from the changes that had taken place consequent on the long period that elapsed between it and the preparation of the Khewut. In the Khadir villages of Purgunnah Hafizabad, remeasurement was found expedient; whilst in Purgunnah Shahdurah, the first measurement proved so inaccurate, that nearly every village had to be remeasured, thus entailing great trouble and loss of time. In Purgunnahs Ramnuggur, Shekoopoorah, and the greater portion of Hafizabad, a careful "potal" proved sufficient. For the "Bar" villages I only thought it necessary to measure the cultivated land with that lately abandoned; the total areas being taken from the professional survey. For all practical purposes, the professional measurement of the uncultivated portions of the "Bar," extending as it does over many hundred square miles, will I trust be considered sufficient.

42.—The comparison of the professional areas with those given in by the Putwarries has been carefully done by myself, and all those measurements rejected in which the discrepancy was

more than 10 per cent. in the cultivation, and 5 per cent. in the total area. It may perhaps be urged that a discrepancy of 9 or 10 per cent. in the returns of cultivation is too large; but experience has taught me that it is impossible to obtain more accurate results, more especially when the two measurements have not been carried on simultaneously.

43.—Regarding the past history of this tract in the Imperial times little or nothing can be learnt. Under the Sikhs it was ruled by various Kardars, of whom the following are worthy of mention:—

Purgunnah Goojranwala.—General Avitabile, and Sardar Hurree Sing.

Purgunnah Ramnuggur.—Sardar Desa Sing Man, Sardar Joahur Sing Bustunee, General Avitabile, and Dewan Sawun Mull.

Purgunnah Hafizabad.—Sardar Futtch Sing, Sardar Dull Sing, Dewan Sawun Mull, and Rajah Goolab Sing.

Purgunnah Shekoopoorah.—Goorbuksh Sing, the Ranee Nikaeen, and many others.

44.—The revenue system in vogue with these Kardars was almost invariably that of appraisalment of the crop or “Kunkoot;” even with General Avitabile, though money jummas were fixed, and sunnuds given to the zemindars, still they do not appear to have been acted up to. Everything depended on the caprice of the Kardar, who took in cash or kind as suited him best. Whatever money payments there were, were on account of the well land. The crops in the “Sylabee,” &c., were always appraised.

45.—The evil consequences attendant on this system are worthy of notice, if only to show what the effect has been on our present system of revenue collections. First, it made the people improvident; they knew that the more they worked, and the larger their returns, so in proportion would the Government demand be enhanced; whilst the more idle they were, the less would they have to pay to Government. Thus was a premium offered for idleness. Secondly, it was directly to the advantage of the Kardar that the cultivation should increase: it therefore became his interest to give over the land to those who would till it best, who were generally mere cultivators. Thus the rights of proprietors were disregarded, and the value of property consequently decreased.

46.—The result of this depreciation in the value of property in land is, that instead of finding the village communities strong, with elements of stability in them, we see them weak, unable to afford help to each other, and one and all repudiating the principle of joint responsibility. The consequence of this “Kun” system has been to make the people improvident to the last degree. They have never been accustomed to pay for more or less than the actual return of the crop. They do not understand providing for the exigencies of a bad season by laying by from a good one: consequently fixed and regular money payments are very unpopular with them. Again, formerly they always looked to Government for help in sinking wells, &c. This help they readily got from the Kardars, who were personally interested in extending the cultivation. The result is that now they can do nothing for themselves.

47.—In addition to the regular revenue, many extra dues were exacted by the Kardars under the denomination of “Abwab.” The following are worthy of notice:—

“Nazur,” 1 rupee per harvest, from each well.

“Farash Khana,” 1 rupee per village.

“Tope Khana,” from 1 to 2 rupees per village.

“Hoolee,” from 1 to 2 rupees per village.

The principal artisans, as blacksmiths, weavers, tanners, &c., were taxed at the rate of 1 rupee per house. The inferior workmen (“the kumeens”) had to pay 8 annas per house. Traders were also taxed at from 1 to 2 rupees each. In the Shekoopoorah Ilauqa, where collections were chiefly in kind, 1 rupee per “manee” of grain was taken for the difference in prices. Eight annas per “manee” was also exacted on account of the cost of carriage to Lahore, unless the cultivator chose to transport the grain there himself. Dues were also exacted for the right of pasturage in the “Belas” on the river banks: the rates varied considerably in different localities, and at different seasons of the year.

48.—The summary settlement of the greater portion of this district was made by Mr. A. Cocks in the year 1847, that is, under the Resident’s regency. A small portion, however, *viz.*, that formerly included in Purgunnahs Wuzcerabad and Eminabad, was settled by Major Lake. It was calculated on the average receipts of the five previous years, after a reduction of 10 per cent. With one exception, *viz.*, a part of the Hafizabad Purgunnah, the cultivated land only was taxed, nothing being imposed on account of any extra dues. In Purgunnah Hafizabad, however, out of a jumma of 19,000 rupees the sum of 2,080 rupees was levied on account of grazing dues, or “trinnee,” in 34 villages. Another peculiarity also in this purgunnah worthy of notice is this, that the “inams,” often amounting to as much as $\frac{1}{4}$ th and $\frac{1}{3}$ rd of the jumma, were preserved intact, and granted to the people.

49.—Considering then that the summary settlement was made simply on returns of former receipts, without any reference whatever to the capabilities of estates, their condition, statistics, &c., it ceases to be a matter of wonder that it should have proved unequal. In addition, however, to its inequality, the assessment has generally proved severe, and in some instances very much so. For this, however, it is by no means difficult to account; and the following may be enumerated as the chief reasons for the same:—

1st.—*The great fall in prices*, which told very severely in the highly irrigated tracts.

2nd.—*The scarcity of money*, the supply having diminished by the great falling off of receipts from service, and the demand increased by the system of fixed money payments.

3rd.—*The increased difficulty of obtaining money*, in consequence of greater amount of security demanded.

4th.—*The deplorable effects of the two droughts of 1849 and 1853*, as shewn by mortality amongst the people, and murrain amongst the cattle, the number of wells deserted, and the large amount of land lately abandoned.

50.—It is not surprising, therefore, that the summary settlement proved high, or that when we come to look at it in its actual working, we find that every year the collections proved difficult, and balances accrued. The severity of this settlement, however, was most felt in the highly irrigated tracts. Nor is this surprising when we consider that it was based on actual returns of produce, without any allowance being granted for expenses incurred, or reference made to the amount of capital expended before any return at all can be hoped for. In actual figures, we find that out of the total balance which accrued on the summary settlement, the percentage of balance on the tract artificially irrigated is 29 per cent., whilst that in the Khadir and alluvial portion is only 8.

51.—The actual percentage of collections and balances for each year of the summary settlement is as follows:—

<i>Sumbut 1906.</i>	<i>Sumbut 1907.</i>	<i>Sumbut 1908.</i>	<i>Sumbut 1909.</i>	<i>Sumbut 1910.</i>
90 per cent.	98 per cent.	97 per cent.	93 per cent.	85 per cent.
10 per cent.	2 per cent.	3 per cent.	7 per cent.	15 per cent.

It also appeared that during the whole period of this settlement there has been an average balance of $7\frac{1}{2}$ per cent. on the total demands, which in the two years of drought increased up to 10 and 15 per cent. It was evident, therefore, that reduction was necessary, and that to ensure for the future regular payments, and determine on an assessment that could be reasonably expected to work well through any number of years, a considerable amount of Government revenue must be sacrificed. The following considerations also convinced me that a light assessment only could work well and successfully in the tract:—*viz.*, the general inferiority of the soil; great depth of water from the surface; the absence of development of natural resources; the nomad character of the people; their idleness and improvidence; their thievish propensities and aversion to money payments; the absence of proprietary rights, and low value of landed property; the scantiness of the population; and the absence of cultivators.

52.—I will now proceed to notice briefly my “data” for assessment. We have already seen that under the Sikhs money payments were almost unknown. An attempt was made by General Avitabile to introduce a system of fixed village assessments for a series of years, but it proved a failure, and the attempt was not repeated. Indeed, under none of the Sikh rulers had there been any fiscal administration conducted on a great scale, or on uniform principles, which would prove of any use in guiding assessment.

53.—Rent rates had hardly been heard of, and rates on land were very uncommon; still, I found on enquiry that rates on wells and yokes were universally acknowledged; indeed so well recognized were they, that I discovered that the variations of these rates in the different tracts, according to the nature of the soil, depth of water, condition of the wells, &c., could be ascertained without much difficulty. Thus there was a fixed rate for a well in the Churkurree Mehal; so much less for one in the Khadir: still less for one in the Bangur; and least of all for one in the “Bar.” So again with yokes. Here then were valuable data, which could be applied with ease, and worked out with accuracy.

54.—Again, though rent rates were unknown, still I was able to gather together rates which did not differ greatly from revenue rates. Thus, in the highly cultivated well tract it was usual with the Sikh Kardars to tax irrigated land at the following rates per acre:—*viz.*, 1 “pund” of grain, or 2 mus for the “Rubbee,” and 1 rupee in cash for the Khurreef, being equivalent to about 3 rupees per acre per annum. So again for “baranee” land: it was taxed at 1 rupee per acre for such of the crop as came to perfection, being in fact a rate varying from 8 to 12 annas per annum on the whole “baranee” cultivation.

55.—After rates come produce estimates, which were thus obtained:—the ordinary yield per acre of each kind of crop, together with its average money value, was first ascertained, then from the Jinswars were obtained the total number of acres entered under each kind of produce, which being multiplied into the average money value per acre gave the total value of the gross produce; of this one-sixth was assumed as the Government share in irrigated land, and one-fifth in “Sylabee” and unirrigated.

56.—Then I had the “Doul” or estimate of the Tehseeldar or Deputy Collector, given after mature consideration and personal inspection of the estate; and lastly my own personal investigation and enquiries. Each village was visited by myself; its condition and statistics carefully ascertained and noted down on the spot, and its former history enquired into; so that by the time the inspection of the whole tract had been completed, very little of anything worthy of notice, and bearing in any way on the condition of the people, as well as the capabilities and resources of the district, could have escaped my observation.

57.—So much for data. I will now proceed to state briefly my mode of assessment. This was effected by purgunnahs; each purgunnah having been separately assessed, and the jummas separately announced. My first step was to divide off the purgunnah into a certain number of topographical chucks or circles, in each of which certain prominent characteristics of soil, depth of water, and general resources were to be found pervading all the estates contained within it. And here I must notice that these chucks were not fanciful or arbitrary divisions of my own, but such as were well known and recognized by the people, each containing certain prominent features peculiar to itself, and common to none of the others. I will briefly enumerate them:—the *Khadir*, or alluvial tract; the *Bangur*, or that lying next to the *Khadir*; the *Deg*, or the tract in the vicinity of land irrigated by the *Deg* nuddee; the *Churkurree Mehal*, or celebrated well tract; the *Mera*, or another well tract, but inferior to the preceding; the *Adjoining Bar*, or tract lying on the edge of the *Bar*; and lastly, the *Bar*. A colored sketch map, illustrating these chucks, &c., should have accompanied this report, had I succeeded in re-obtaining the map originally forwarded to your office some two years ago.

58.—This done, I then applied my data of assessment to each tract separately; and after careful consideration of the condition of each, its several resources, natural and artificial, the character of the people, their habits and condition, the working of the Summary Settlement, the amount of balances, and all other statistics of every kind, I determined on the general amount of reduction necessary. I then framed my rates, and working them out first on the statistics of the whole chuck, and afterwards separately for each estate, I ascertained whether they gave a large reduction in all greatly over-assessed villages, moderate in villages only slightly over-assessed, little or none in such as were considered fairly assessed, and enhancement in estates well known as notoriously under-assessed. If they did, and the general result arrived at agreed pretty nearly with what I had already laid down in my mind as necessary and expedient, I felt satisfied, and, considering the rates generally appropriate, I proceeded to work them out into all the necessary details; if not, I again scrutinized them, readjusted and altered them until I was to fix on such as would enable me to obtain the necessary results.

59.—A minute and detailed account of the assessment, with my rates and other particulars, having been given in the annexed Appendices I, II, III, IV, V, and VI, it will suffice for me to state here generally the total amount of reduction given, the necessity for granting which has already been dwelt on by me at considerable length. This amount being nearly 17 per cent. on the former *Khalsa* jumma, as fixed at the original Summary Settlement, may appear somewhat large, but still it is not in my opinion any more than was absolutely necessary to meet the exigencies of a tract so impoverished and deteriorated as this has become of late years.

Name.	Summary jumma.	Proposed jumma.	Amount of reduction.	Percentage of reduction.
Goojranwallah Tehseel ...	2,24,790	1,83,024	41,766	18½
Wuzeerabad Do. ...	1,64,270	1,37,117	27,153	16½
Hafizabad Do. ...	1,59,744	1,28,737	31,007	19½
Total, Goojranwallah District ...	5,48,804	4,48,878	99,926	18½
Shurrupoor Tehseel ...	1,01,581	81,683	19,898	19½
Lahore Villages ...	35,334	34,840	494	1½
Chooneean Do. ...	21,760	22,370		
Grand Total ...	7,07,479	5,87,771	1,19,708	17 nearly.

60.—The financial result—that is, the result of the new settlement as it affects the Government revenue, both *khalsa* and *jageer*,—may be seen from the following statement:—

<i>Tehseel.</i>	<i>Khalsa.</i>				<i>Jageer.</i>				<i>Total of Khalsa and Jageer.</i>			
	Former Juma.	Present Juma.	Increase.	Decrease.	Former Juma.	Present Juma.	Increase.	Decrease.	Former Juma.	Present Juma.	Increase.	Decrease.
Goojranwalla, ...	2,24,790	1,83,024	...	41,766	66,788	49,757	...	17,031	2,91,578	2,32,781	...	58,797
Wuzcerabad, ...	1,64,270	1,37,117	...	27,153	37,297	30,528	...	6,769	2,01,567	1,67,645	...	33,922
Hafizabad, ...	1,59,744	1,28,737	...	31,007	16,661	14,199	...	2,462	1,76,405	1,42,936	...	33,469
Total of Zillah Goojranwala,	5,48,804	4,48,878	...	99,926	1,20,746	94,484	...	26,262	6,69,550	5,43,362	...	1,26,188
Shurruckpoor, ...	1,01,581	81,683	...	19,898	52,405	44,589	...	7,816	1,53,986	1,26,272	...	27,714
Lahore villages, ...	35,334	34,840	...	494	17,850	17,850	...	...	53,184	52,690	...	494
Chooneean vil- lages	21,760	22,370	610	...	1,260	1,235	...	25	23,020	23,605	585	...
Grand Total,...	7,07,478	5,87,771	...	1,19,708	1,92,261	1,58,158	...	34,103	8,99,740	7,46,029	...	1,53,811

In addition to the above, the unresumed "maafee" land will, on resumption, be chargeable with Rupees 54,000 of revenue. These plots have been assessed, and the amount demandable from them entered in the Supplementary Khewat, in conformity with the Financial Commissioner's instructions, to allow of the realization of the Lumberdar's and Putwarree's fees due from them. The aggregate, therefore, of the total jumma newly assessed—i. e., khalsa jageer and "maafee"—will be about eight lakhs.

61.—In Appendix VIII will be found the revenue rates adopted by me, arranged according to purgunnahs and chucks; whilst Appendix IX shows in detail the averages and percentages of soils, cultivation, population, holdings, and revenue liabilities. A reference to this statement will, I think, prove that the revenue has been carefully and equally distributed over the various tehseels, the variation in the rate at which the proposed jumma falls on the cultivated area being at once accounted for by variations in soil, irrigation, cultivation, density of population, &c. In the Goojranwala District, the acre rate of the proposed jumma on cultivation is Rs. 1-2-0, with the percentage of irrigation at 73; the rate on the malgoozaree area is also only Rs. 0-11-0, proving in my opinion that the assessment is very moderate, if not absolutely light. Again, over the whole tract the rate on cultivation varies from Rs. 6-8-0 to Rs. 0-14-0, whilst the corresponding variation in the percentage of irrigation is from 85 to 68. I should also not omit to mention that the totals found in the Appendices on the assessment will not be found to agree with those given in the preceding para. (60), in consequence of the former having reference to the old purgunnahs, whilst the latter applies to the new tehseels.

62.—By simply comparing the relative rates at which neighbouring estates are taxed, the variations may perhaps appear numerous and startling; but they may always be traced to some or other of the following causes:—superiority or inferiority of soil; the vicinity or otherwise of fertilizing streams; the existence of low drainage lands; the proximity of markets; the capabilities of the wells, with the depth of water from the surface, and number of yokes; the condition of the estate; and the possibility or otherwise of sinking wells. It will be often found that an estate with superior soil will not be equal to sinking wells, on account of impoverishment from over-assessment or any other cause; or, from its dependence on neighbouring villages for assistance in the cultivation of its area, will not be equal to paying a jumma nearly up to the rates.

63.—Statement No. VI. may perhaps lead to the conclusion that the assessments in many villages are progressive; they cannot, however, in my opinion, be considered progressive in the strict sense of the term. The principle on which I have proceeded is the consequence of the severe drought of 1853: all villages which had suffered severely from this calamity I first assessed with reference to the quality of the soil and all other considerations, and then making an allowance for the land of cultivation, the degree of mortality and distress that had prevailed, and the circumstances of the zemindars, I deducted such proportion from my assessment for the first two or three years as would enable them to restore their estates to their condition previous to the drought.

64.—The announcement of the jummas was accomplished with little or no difficulty. Indeed, as reductions had been granted in almost every estate, the engagements were entered into readily, and the "durkhasts" signed and attested without the occurrence of hardly a single case of recusancy. The principle of giving in "durkhasts," however, is not understood by the people, who appear to consider themselves at liberty to throw up their contracts whenever they choose. This is especially the case in villages with progressive jummas. On the announcement of the jumma the "durkhast" was given in readily, and the revenue paid regularly for the period that the reduced jumma held good; but no sooner did the time for enhancement arrive than the people gave in a petition begging to be released from their engagements. This has been by no means encouraging to me, and has at times proved a source of considerable annoyance, but still it was not more than was to be expected from people so ignorant and reculant as they are in this district.

65.—The total number of villages farmed has been 20 ; whilst in 16 other estates transfer of the proprietary rights has been effected. Each of these cases, however, having been separately reported on by me, and received especial sanction, I need not here enter into any lengthened report regarding them ; suffice it to say that, in every case of transfer of proprietary rights, a renunciation (*inkarnamah*) of all proprietary rights of every kind was first voluntarily given in by the original proprietors ; whilst in all cases of farm, although the farmer has been brought forward by the proprietors themselves, still he has been made the *Suddur Malgoozar*,—the engagement having been entered into by him, and he alone being considered responsible to Government for the regular payment of the revenue.

66.—Regarding land held rent-free, and therefore exempt from the payment of revenue, there are three classes of cases,—*viz.*, *jageers*, *maafees*, and *inams*.

The investigation of the *jageer* claims was not conducted in the Department ; a few isolated cases, amounting in the whole to 15, having been decided and disposed of.

The investigation of the *maafees* has been done entirely in this office. The task has proved a very arduous and laborious one, the total number of cases decided having been 6,720. I am sanguine that very few, if any, genuine claims have been overlooked, as the people have been by no means backward in coming forward to bring their suits.

With respect to *inams*, as they form an important feature in the revenue administration, I shall proceed to notice them rather more at length.

67.—The system of granting *inams* to industrious proprietors, and even cultivators, was much in vogue with the Sikhs, more especially with their most famous *Kardars*, as *Sawun Mull* and others. The *inam* was either in the form of a well held rent-free, or a share of a well, of so many yokes, or else an actual money payment, *i. e.*, a refund from the amount realized by "*Kunkoot*," at some fixed rate. At the Summary Settlement, in the finer and more richly cultivated portions of the district, these *inams* were in great measure resumed, the *lumberdars'* fees (*huq puchotra*) being considered as more than an equivalent for it. During the course of the present Settlement, the number of claims for *inams* in the *Goojranwala* and *Wuzeerabad Purgunnahs* has not proved very numerous ; they have been rather for wells, or shares of a well, or cash payments ; when proved, an equivalent for the amount claimed has been given in land, which has been declared rent-free.

68.—But as we go further south, and more especially in the *Hafizabad Purgunnah* and villages of the "*Bar*," we find the *inam* increasing in importance, and by no means unfrequently meet with the third and fourth portion of an estate so held. The origin of this system may be easily accounted for. This tract has only been brought under cultivation within the last 20 or 25 years. The inhabitants were originally a nomad race, very averse to a settled life and agricultural pursuits. As an inducement to them, therefore, to settle, and cultivate the soil, large *inams* were granted, which have held good and been in force up to the present day. In the *Hafizabad Purgunnah*, so strong was the popular feeling in favor of these *inams*, that, notwithstanding the Summary Settlement and introduction of our revenue system, the *Lumberdars*, instead of realizing their *huq puchotra*, have continued enjoying their old *inams*. As regards portions of villages held in *inam*, the majority of these were granted by Mr. Cocks when fixing his Summary Settlement, and they have been in most instances upheld by me.

69.—The principle I have laid down in dealing with these *inams* is this, that having been originally granted as rewards for industry, for the improvement of the land and extension of the cultivation, they shall be only upheld and continued on the same grounds. Thus, to give an example, a village under *Sawun Mull* with 5 working wells enjoyed one-third *inams*,—that is, at his fixed rate of Rs. 60 per well, the revenue of the *whole* village would be Rs. 300, of which Rs. 200, or two-thirds, would be the *khalsa* or Government portion, and Rs. 100, or one-third, the *inam*. At the Summary Settlement the former *jumma* of Rs. 300 was upheld, *i. e.*, the *khalsa* portion was Rs. 200, and the *inam* Rs. 100. On coming to make my assessment, and on looking over the village, I find it in good order, all the wells working, and the revenue paid regularly. I therefore consider the proprietors entitled to the whole of their *inam*, and fix the proposed *jumma* at Rs. 200, supposing my rate to be Rs. 60 per well. But if on the other hand I find the proprietors have been idle, that they have allowed the estate to get into bad order, and one of the wells to fall in, then I proceed in this way : I first calculate what the estate would have been worth had all the wells been working ; from the amount thus gained I deduct the *inams* claimed, and the remainder will show the proposed *jumma* of the village ; whilst the difference between the remainder and the amount obtained by applying my rates to the actual number of working wells will give the real *inam* granted. Thus, to take the above example, one well having fallen in, 4 working wells remain : at Rs. 60 per well, the village is worth Rs. 240 ; but originally there were 5 wells, which give Rs. 300 ; deduct one-third from this, and we get Rs. 200 remaining, which will be the proposed *jumma* ; whilst the difference between this and Rs. 240, or Rs. 40, will be the amount of *inam* granted. Again supposing that 2 out of the 5 wells had fallen in, still the proposed *jumma* will be Rs. 200, whilst in this case there will be no *inam* at all. I anticipate that this will work well, for hereby a direct premium is offered for industry and capital ; for in the last instance the proprietors have only to rebuild their two wells, and they will at once begin to re-enjoy their former *inam*.

70.—The extra items of Road Fund, School Fees, *Putwarrees* and *Lumberdars'* dues, do not require especial notice here. As to the regulation of the "*mulba*," or village expenses, it has been ruled that no percentages shall be fixed as the limit demandable by the *Lumberdars*,

but that the accounts are to be annually readjusted. With respect to the realization of these extra dues from the rent-free plots, the instructions of the Financial Commissioner, conveyed in his letter No. 357, dated 14th February 1855, have been strictly carried out. The amount thus realized to the Road Fund alone is about Rs. 540 per annum. I consider this arrangement a very fair and just one, as well as one that will work well practically. One of the good results already arising from it is, that I have been enabled thereby to appoint some 10 extra Putwarrees.

71.—We now come to notice the preparation and formation of the record of rights and liabilities. In richly cultivated tracts, such as the Jullundhur Doab and elsewhere, where the village communities are thriving, common rights and privileges well known and enjoyed, and the principle of joint responsibility acknowledged and understood, the formation of this record has generally proved little more than a mere matter of routine. In such cases it may be best left to the people themselves, the presiding officer taking care that the real wishes of the people are consulted, and that the usages and customs extant in each estate, together with the rights, liabilities, and privileges of each proprietor, are accurately recorded.

72.—But such a mode of procedure will not work in this tract. Here, in consequence of the unsettled state of the country for the last half century, the former prevalence of the "Kun" system (the evil effect of which has been almost to do away with the distinction of proprietor and cultivator), the ill-defined nature of the proprietary rights, and the pastoral habits and nomad character of the people, we do not meet with those thriving village communities, bound together by ties of clanship and brotherhood, every member of which will take care that his own rights are recorded, and the liabilities of the others not omitted. On the contrary, the people here almost invariably ignore the principle of joint responsibility. Under the Sikhs each was considered liable only for his own well or plot of cultivation, and if one member failed to pay his quota of the revenue, it was not exacted from the others. The consequence, therefore, has been that the people generally have been very tardy in affording aid in preparation of this record, it being beyond their comprehension that a system of joint privileges must also necessarily be one of joint responsibility.

73.—Another difficulty that meets one is the general apathy of the people; for so long have they been accustomed to have no voice in the management of the affairs of the village, that they are now very slow at comprehending that their wishes are consulted with any view to their real benefit. Again, the secret opposition of the Lumberdars has proved an obstacle. This, however, is not more than was to be expected, when we remember that these Lumberdars were the men who, under the Sikhs, enjoyed all the profits. Any attempt, therefore, now made to define and secure the rights of the community at large cannot be very acceptable to them, tending, as it must, to circumscribe their profits, and diminish their influence and consequence. I am, however, clearly of opinion that the too sudden introduction of our revenue system has not been attended with favorable results. It has taken the power out of the hands of the Lumberdars, who alone have been hitherto accustomed to exercise it, and made it over to those who neither appreciate the gift, nor understand the benefits accruing therefrom. The consequence has been, that Government has been a loser in a financial point of view, if in no other.

74.—Another difficulty has been the low value of land. Where land is rich and valuable, much sought after and appreciated, the rights and liabilities attaching to property in it are well known, easily attested, and accurately recorded; but here, where land is a mere drug in the market, where property in the same is more dreaded for the liabilities attendant thereon, than sought after for the profits accruing therefrom, it will not be a matter of wonder that the attestation of a record showing accurately its rights and liabilities should have been attended with so much labor and trouble.

75.—The *modus operandi* has been as follows:—After the measurement, the Khushreh is taken to the village by the Putwarree; the people are brought together, and a genealogical tree carefully drawn out. The entries in the Khushreh are then carefully attested in their presence, the Chitta Khuteonee also prepared, and a paper drawn out, called the "Khewat Kham," shewing exactly how the revenue has hitherto been distributed by the people. After that, with the aid of the above papers, a rough estimate is made by the Putwarree, showing pretty accurately what each proprietor will have to pay according to the new proposed jumma; and to each proprietor is given a slip of paper ("purcha") showing the amount of land, with number of wells, &c., belonging to him, together with the probable amount of revenue he will in future have to pay. After the lapse of a fortnight or so, by which time it is supposed each proprietor will have had time to study his "purcha," and bring forward any claims he may have to make, a second attestation takes place, when all disputes are heard and decided, each man's holding carefully attested, the position of each cultivator accurately determined, and all the proprietors consulted as to the future method of distributing the revenue. This having been done, the "Khewat" is made out, a final attestation takes place, and each proprietor and cultivator receives another "purcha," showing accurately his rights and liabilities.

76.—The distribution of the jumma has been generally effected by following customs already in vogue. The division of shares has sometimes been involved in doubt, and at first it proved a matter of considerable difficulty to ascertain accurately what the former distribution had been; but ultimately, when each man's rights had been carefully defined, the revenue readjusted and equitably distributed, and all the hidden resources of each estate brought to light, we find each individual shareholder demanding and contesting his right to a share of

the common land and manorial perquisites. From the Khewat records it appears that out of 1,604 mouzahs, after subtracting 80 Government mehals, 291 have distributed the jumma on shares, 876 on wells, 17 on yokes, and 340 on the land.

77.—In the “Bar,” where some cultivate and some keep cattle, they have fixed among themselves what portion of the jumma shall be debited to the cultivation, and what to the waste,—those who cultivate pay the one sum, those who graze pay the other. In all cases the conditions relative to the waste land of the estate have been minutely described, as also the rules which regulate its special appropriation or its cultivation. Any fixed “Bâch” will in most cases be much affected by new cultivation: it will be sometimes necessary to re-distribute annually, but all these matters have been disposed of in the Wajib-ul-urz.

78.—In the “Bar” also the allotment of mehals has met with attention. In cases where there subsisted a half union between the parent villages and their offshoots, especially where the secondary villages, chiefly depending on their cattle, wished that this connection should be preserved, doubting their own ability to perform the duties of malgozaree unsupported, in such cases the secondary was incorporated with the primary mehal; otherwise they were severed, and the offshoot erected into a distinct mehal.

79.—The papers comprising the record of rights are for the most part similar to those prepared in the North-Western Provinces. There is, however, one new return introduced, which requires special notice, viz., the *Well Statement*—in my opinion a most important document in a tract where the distribution of the revenue is almost entirely on wells. The principal headings in this statement are the following:—names of wells; names of proprietors, with details of shares; names and number of cultivators; amount of land in detail; the number of yokes; and amount of jumma. As before stated, I consider this a most important document, and I am confident that in all instances where it has been carefully and accurately prepared, the working of the settlement will be, comparatively speaking, easy. I must here mention, that in all the well tracts the custom is to distribute the revenue on the wells according to their condition, number of yokes, depth of water, nature of soil and produce, without any reference to rates on land. The principle of distribution is thoroughly understood by the people, is very acceptable to them, and will, in my opinion, work well.

80.—In conclusion on this part of my subject, I will just enumerate briefly the points to which the attention of the presiding officer has been chiefly drawn in the attestation of the Khewut:—pedigree table to be carefully drawn out and compared with shares as shown in my other papers: all additions, alterations, &c., made in the Chitta Khuteonee at the time of attestation to be most carefully and accurately entered in the fair copy: in villages with turrufs and puttees, comparison to be made between them and the pedigree table: if revenue be distributed on shares, then care to be taken that holdings correspond with shares; when this is not the case, the cause of non-correspondence to be clearly ascertained and defined: division of common land and profits to be clearly and accurately defined and provided for: rights of cultivators to be entered: “Abwab” and all extra dues from “Kumeens” and others to be clearly stated in detail: the village expenses to be provided for: care to be taken that the principles of joint responsibility are explained to them and understood by them: lastly, each proprietor should be able to state accurately and readily the amount of his holding, his quota of revenue, and his share generally in the rights and responsibilities of the village.

81.—The majority of the proprietors hold their land by right of possession rather than by any ancestral title. In the Khadir especially each is proprietor of the plot of land he has reclaimed from the waste (“Bootab Mar”). In the well tracts we sometimes meet with villages where the land is divided according to ancestral shares, but such instances are rare.

82.—The greater portion of the disputes have been either regarding separate plots of land, or shares in wells. There have also been a good many claims to the proprietary rights of whole wells, but claims for whole villages or portions of villages have not been frequent. About one-half of the disputes have either been compromised or settled by Moonsiffs: the other half have been decided by the presiding officer.

83.—There have been very few, if any, disputes regarding cultivators with right of possession. The fact is, that in consequence of the population and the scarcity of cultivators, the proprietors have been only too glad to give up to all their cultivators the right of possession, with the object of inducing them to remain on the estate. We find, moreover, that not only have the majority of cultivators been entered as hereditary, but that many, also, hold their land at the same rates as proprietors. “Malikanah” is the exception, not the rule, and it rarely, if ever, exceeds 6½ per cent., or one anna in the rupee.

84.—Voluntary sale and mortgage may be said to be unknown in the Hafzabad Purgunnah, It is also but rarely met with in the Goojranwala and Wuzecrabad Purgunnahs; but, strange to say, it is very common in the river villages of the Shurrukpoor Purgunnah, i. e., those on the banks of the Ravoe. Here it is to be found in almost every village; and in these estates not only have the proprietors the power of mortgaging their land, but the cultivators also exercise the right of mortgaging their cultivation. This latter peculiarity is to be found chiefly amongst Lobanahs. I can only account for this by the supposition that, the population being denser and land more in request, its value has become greatly enhanced, as also have all the rights attaching to property in the same.

85.—With respect to the division of common lands (“Shamilat”), the cultivated land, together with land lately abandoned, has generally been portioned off, and divided amongst the several proprietors; but the uncultivated land—that is, the land fit for cultivation—as well

as all pasturage land, has remained undivided, whilst the rights of each individual proprietor in the same have been accurately defined. A special clause has also been introduced into the "Wajib-ul-uruz," shewing exactly the terms under which old wells may be repaired and new wells sunk, the rates leviable from new land just broken up, &c., &c. This was done to prevent the endless disputes which would otherwise have inevitably arisen at some future period regarding adjustment of all those points.

86.—The distribution of the jumma has differed in different parts. Thus in the Khadir it has been generally by irrigated and unirrigated rates; sometimes, but rarely, on soils; and in a few instances by a general rate: in the Shurrukpoor Khadir and Bangur, either on shares or by irrigated and unirrigated rates: whilst in the Bangur of Purgunnahs Wuzerabad and Hafzabad, almost entirely on wells: in the Deg Chuk for the most part on shares, or by a general rate, sometimes by unirrigated and irrigated rates: in the well tracts, as also in the chuks adjoining the Bar, and also in the Bar, almost entirely on wells according to their condition ("Hyseeat"),—where no wells, then according to shares: whilst among the different shareholders on each well the actual distribution has been either according to shares or else on soils.

87.—The profits of the "Shamilat" have been carefully and accurately entered in the administration paper. The following are worthy of notice as peculiar to this part of the country,—the "Thanaput," or one rupee which is realized on all occasions of marriage, and is generally considered the perquisite of the village Merasee: a tax of Re. 1-8 per annum on each cart in the "Bar" villages: also, in the "Bar," a fourth share of the profits on all wood and charcoal sold. In the Khadir, all the profits from "Moonj," "Kana," &c., are equally divided amongst the brotherhood.

88.—The system of self-taxation has been carried on smoothly, for the distribution has been effected almost entirely by the people themselves, and disputes have been very rare except in some of the river villages. I am a great advocate for the distribution on wells according to their condition. It is thoroughly understood and appreciated by the people, has been effected with ease, and will, I feel confident, work well. A reference to para. 76 will shew that more than half the estates in this district have adopted this mode of distribution, viz., 876 mouzals out of 1,604. Soil rates are almost entirely unknown in the well tracts: they would never work. Indeed, with the exception of the Khadir, I am very averse to rates of any kind in the internal distribution; and where they have been introduced, I feel sure that before many years have elapsed the people will contrive to effect redistribution. I have done my best to make the people understand this, but of course where they insisted on adopting rates, I could only carry out their wishes.

89.—In the appointment of Lumberdars the rules laid down by the Financial Commissioner in his circular No. 67, dated 17th July 1855, have been carried out. Prior to the issuing of these instructions some of the former Lumberdars had been removed in consequence of the amount of revenue collected by each being very limited; but since the receipt of the above-named circular the former Lumberdars have not been removed without very good cause, nor new ones appointed without their claims being fully and clearly established. The total number of Lumberdars appointed has been 2,492, whilst the average jumma amount of revenue collected by each Lumberdar is Rs. 320. This may be considered a very low average, but it was unavoidable, both on account of the prevalence of puttees and turufs in so many estates, and also to the almost universal existence of more than one Lumberdar even in the smallest villages.

90.—It is not difficult to account for this superabundance of Lumberdars. Formerly each proprietor was considered responsible only for the revenue of his own wells. On these he received some small inams, which he considered in the light of "Huq Lumberdaree." At the summary settlement, therefore, he came forward as one of the Lumberdars, and very often was successful in getting his name introduced into the Durkhast. The adjustment of these rival claims has proved by no means an easy task. It is difficult to conceive anything equal to the importunity with which these claims were urged, and the bitter disappointment which failure occasioned. It is to be hoped that the arrangement finally made will prove practicable and work well.

91.—In the Hafzabad Purgunnah, during the period of the summary settlement, the old system of inam has remained in force, the Huq "Puchotra" being quite unknown now that the appointment of Lumberdars has been readjusted. I have fully explained to the people what are the rights the Lumberdars will enjoy; and since the introduction of the revised settlement the collection by the Lumberdars of the "Huq Puchotra" has been gradually coming into vogue. In all cases, however, where it was found impracticable to appoint as Lumberdars all those who have hitherto enjoyed inam, I have taken the precaution to secure for those who could not be appointed Lumberdars some portion of their former inam.

92.—The appointment of Putwarees, the marking off of Putwarees' circles, and the arrangements proposed for enhancing their rate of pay, have already been reported by me in my letter No. 82, dated 16th August 1855, and received your sanction. The total number of Putwarees is 236: their average yearly salaries are about Rs. 120, or Rs. 10 per mensem nearly. Mouzehwar sketch maps have also been drawn up for the several tehseels, shewing the Putwaree circles into which the estates have been parcelled out, each circle having been marked by a distinct color.

93.—I think I may safely assert that all the Putwarees will be found efficient. They have all been actively employed from the commencement of settlement operations in the formation of the settlement records, and are in my opinion quite equal, under proper supervision, to the preparation of all the regular future Putwaree records. These "Huftaganah" papers, as they are commonly called, having already been reported on in detail by me in my letter No. 73, dated 25th July 1855, do not require special notice here.

94.—In addition to the Putwarees, it is proposed to appoint two Kanoongoes to each tehseel, one to each purgunnah, with a Suddur Kanoongoe to the District Office. To these officers will be entrusted the preservation and keeping up of the settlement records: they will have the direct management of the Putwarees, who will under their supervision prepare the regular yearly papers and returns. As each and all of these have served for many months in this Settlement Department, and been especially selected by me for this duty, I am sanguine that they will prove efficient, and the system work well.

95.—In conformity with the instructions issued by the Financial Commissioner, nothing has been done by the department towards the organization of the village police: whilst all the papers containing any statistical information regarding the chowkeedars and their remuneration were long ago made over to the District Officer, by whom all the necessary arrangements have been made.

96.—Having thus enumerated all that has been already done in this settlement, I will now in conclusion proceed to notice briefly its future working, and to remark on the various points connected with it worthy of careful consideration, as likely to affect hereafter its utility or otherwise.

97.—First, the Tehseeldars should be judiciously selected, and, if they have not already served in the settlement, they should be fully instructed in all branches of settlement work, so as to become complete masters of all the intricate details connected with the various settlement records and papers. I would point especially to the Putwarees' papers ("Huftaganah"), with which every Tehseeldar should be quite familiar. All their proceedings with respect to the Putwarees should be strictly supervised, and I would make them personally responsible for the correctness of the yearly papers given in. The whole of the tehseel establishment should also be required to pass an examination in the settlement papers after a certain period, when all who failed to pass should be removed, and competent men appointed in their stead.

98.—Secondly, the preservation of the settlement records should be carefully attended to, all mutations and changes being at once entered, and all alterations and corrections duly made, so that the papers may in reality continue to be, what they profess to be, an accurate record of existing rights and liabilities.

99.—Thirdly, I would advocate the rigid enforcement of all revenue penalties against defaulters. The proposed jumma is to the best of my belief a very light one: large reduction has been granted, and liberal relief afforded to all estates requiring it: should hereafter any estates fall into balance, the fault will lie with the proprietors, and not with the assessment. I would, therefore, in all such cases have immediate recourse to transfer of all the proprietary rights of all defaulters, whether individual Putteedars or whole Puttees; and should this fail, I would then at once proceed to have the estate sold. Farming, or "Kham Tehseel," I would most carefully avoid, for even up to this time the people are so wedded to the former system of payments in kind, that many would bring their estates into balance, with the express object of their being made over to a farmer, or held "Kham Tehseel." I have dwelt thus strongly on this point, as I feel sure that trouble will be hereafter experienced unless care be taken at first, for hitherto all balancees have been followed by remission or reduction, and the people will require one or two severe lessons before they learn that this will not do in future.

100.—Fourthly, a list should be prepared each month by the Tehseeldar, and submitted to the Deputy Commissioner, shewing accurately and in detail the number of wells that require repairs, as also those that may have fallen in or been deserted from any cause whatsoever. On this list orders should be passed regarding each well separately, stating concisely the future arrangements to be made for bringing it into order, with the amount of Tuccavee that will be granted, &c.

101.—In a district like this, where the state of agriculture is almost entirely dependent on the condition of the wells, too much stress cannot be laid on this point, for until the people become more provident or more in a condition to provide for and help themselves and each other, Government must come forward and do it for them. I have already shewn that the jumma has been almost universally distributed on wells: the breaking down, therefore, of a well, or desertion of its owner, must lead to an increase of the tax leviable from the other well-owners, which will inevitably be followed by the ruin of the estate, unless prompt measures be taken to prevent this by the District Officer.

102.—Should the owner of the deserted well refuse to take the tuccavee offered, or be any longer liable for the payment of the Government revenue, his proprietary right in the same should be at once transferred to some one or other of the other proprietors, many of whom will be only too glad to take the well on the terms offered. I would, if possible, avoid bringing any such wells into the "Shamilat" of the village, for no sooner does it become the property of the whole estate, than each individual proprietor thinks it is not his duty to look after it: and thus it would in all probability remain uncultivated, whilst its revenue liabilities would fall on the entire village without any corresponding return.

103.—Fifthly, the tuccavee advances made for the repair of wells, &c., should be amply sufficient for the purposes for which they may be required : and provided really good security be offered, the terms and period of repayment should be extremely liberal. In years also of drought or murrain amongst the cattle, tuccavee for bullocks becomes a most urgent necessity, and should be liberally granted. Such grants have already been twice made in this district, and followed by most gratifying results : the relief thereby afforded having been almost incalculable.

104.—I trust I shall be excused for having thus dwelt on this part of my subject, but I cannot but help feeling solicitous about the future working of a settlement which has cost me so much trouble and anxiety, and the Government so much money. There may be slight defects in the settlement on omissions in matters of detail here and there, but I feel confident that the general principles on which I have proceeded are correct, and that the settlement will only require careful supervision to work well and successfully.

105.—A detailed statement of the total expenses incurred in the settlement will be found in Appendix XI.; the cost bears a proportion of 32 per cent. to the annual jumma of the entire tract, eight lakhs. This percentage may perhaps seem very high, but having already dwelt at some length on this subject in my letter to your address No. 107, dated 27th October 1855, and shewn that this test of the percentage which the cost bears to the annual jumma is not a fair one to apply to this settlement, I will not enlarge on it now.

106.—I cannot, however, refrain from expressing an opinion that the actual cost of this settlement will be found to be very moderate, when compared with the amount of work performed. Putting out of view the fact that much of the work, and more especially the measurements made before I assumed charge of the settlement, had to be done several times over, I would urge that the actual labor devolving on the settlement depends on the extent of the cultivated area and number of fields, and not on the amount of revenue assessed.

107.—The true test of the cost of a settlement is, in my opinion, the rate at which it falls on the cultivated area. Now in applying this to the Goojranwala settlement, we find that the total cultivated area is 6,49,300 acres, whilst the actual cost incurred has been Rs. 2,56,916, giving the proportion of cost to cultivated area to be at the rate of nearly 40 Rs. for every 100 acres, or six annas and five pie per acre. I will venture to predict that if this rate be compared with the rates of other settlements, the result will be favorable to this settlement, and prove that the actual cost has been anything but excessive.

108.—In conclusion, I would advert to the services of Extra Assistants Mehtab Sing and Davi Ditta. The former has served for more than 2½ years in this settlement, and the latter for 1½ year. They are both able officers, have performed their duties with zeal and assiduity, and given me great satisfaction. I would recommend them both to the favorable notice of Government. It is a matter of congratulation to myself that Mehtab Sing has been appointed permanently to the Goojranwala District to carry on the settlement completed by him under me ; and I shall be only too glad to retain under me for the future the services of Davi Ditta. My best thanks are also due to Lieutenant Elphinstone, for his exertions during the six months he served under me as Assistant Settlement Officer.

APPENDIX I.

Remarks on the revised Settlement and Assessment of Purgunnah Shahdurah, Zillah Lahore.

THE Purgunnah of Shadurah comprises all those villages belonging to the Lahore Tehseel which are situated in the Rechna Doab. It is bounded on the north by the Narowal Purgunnah, on the west by the Purgunnahs of Goojranwala and Shekoopoorah, on the south by that of Shekoopoorah, and on the east by the Ravee. It consists of a long strip of land, running down parallel to the river, in length about 24 miles, and in breadth varying from 3 to 10 miles.

2.—In addition to several large villages, there is one town, the Qusbah of Shahdurah Khas, situated about a couple of miles from the city of Lahore, which is very accessible, the road being fair, and a good bridge of boats built over the Ravee. Two large roads traverse the purgunnah—one the Grand Trunk Road from Lahore to Peshawur, and the other the main road from Lahore to Shekoopoorah. In addition to these there are many smaller roads which existed during the time of the Seiks, all of which are available for wheeled carriage, and of which the zemindars avail themselves to export the produce of their villages to the markets of Shadurah and Lahore.

3.—There are two streams worthy of notice: one the Deg, which flows all the year round, except in seasons of extreme drought. During the rains it overflows its banks, and leaves a rich deposit, which fertilizes all the surrounding country. As it enters the purgunnah, it divides off into two branches, which flow parallel to each other for some 5 miles, the larger to the east of the smaller, and then reunite. The other is called the "Bhed." It takes its rise in some swampy ground in the north of the purgunnah: it exists in the rainy season, drying up after the rains have ceased. Although its fertilizing effect cannot be compared with that of the Deg, still the villages which receive the benefit of its waters have a decided advantage over those which are dependent on their wells alone for irrigation.

4.—The soils are *Rohee*, answering to *Muttyar*; *Dosahee*, or the *Durmut* of the Provinces; *Mear*, corresponding to *Roslee*; and *Tibba*, to *Bhoor*. The people of the country, designate the land generally as *Kulluratee*, a term which may with propriety be applied to it, for with the exception of the best estates situated on or near the banks of the Ravee, all the rest have more or less of *kullur* (saltpetre) in the soil. The degree to which it exists determines in a great measure the productive powers of each estate. It renders the soil hard and unyielding, so that irrigation of some kind or other becomes absolutely necessary to produce any crop at all. The unirrigated soil, therefore, of all the estates, with the exception of those near the river, may be considered as almost entirely unproductive, except in very favorable rainy seasons.

5.—Irrigation from wells exists to a large extent. The cost of building a well ranges from Rs. 150 to 250. Water is found at a reasonable depth from the surface. A well can water 15 to 30 acres annually, but this of course varies according to the quality of the well, number of yokes, nature of soil, &c. The percentage of irrigation on the total cultivation is large, amounting to 79 per cent., including Sylabee.

6.—The prevailing castes are Lobanahs, Raiens, Jats, and Rajpoots. The first three are industrious and good Malgoozars, with the exception of a few Mussulman Jats: the cultivation in estates belonging to them being almost entirely in their own hands, is superior. Some of the Rajpoots are also industrious; but the majority maintain their habitual character of idleness, more especially those whose estates border on the district of Goojranwala, the cultivation being for the most part in the hands of Assamees.

7.—From the general prevalence of the industrious castes, the cultivation may be considered good, the industrious Raiens and Lobanahs doing their best with the hard, unyielding Kullur soil, and the wells being worked day and night. The produce consists almost entirely of rice and wheat. The entire absence of sugar-cane even in the Khadir estates, is remarkable, but easily accounted for by the fact of the ready sale which both rice and wheat meet with in the Lahore markets, thus doing away with the necessity of long fallows, which the growth of sugar-cane necessarily entails. The best rice is grown in the land situated on the banks of the Deg, but every well also has its annual crop of rice. The finest wheat is found in the irrigated Khadir land, and in some of the Deg villages.

8.—Of the past history of this purgunnah not much can be learnt. It appears to have been almost entirely depopulated and waste on the accession of Runjeet Sing, who, however, exerted himself to re-settle the country by giving over land at a mere nominal rent to Lobanahs and Raiens, on their agreeing to settle down and cultivate it. Thus we find these industrious classes here proprietors, whilst in other purgunnahs they are generally in the condition of mere cultivators. From each proprietor also having become the owner of the land he himself reclaimed from the waste (*bootab mar*) and brought under cultivation, we find the holding of each separate and distinct, without any reference to ancestral shares or rights. In the Rajpoot villages, however, proprietary right is claimed and recognized.

9.—With respect to former assessments but little can be said, there not having been any past fiscal administration conducted on fixed principles, which would prove a guide in fixing

assessments. From the vicinity of this purgunnah to Lahore, nearly all the estates were held in Jageer by one or other of the Seik Sirdars, who took in kind from the zemindars, and whose past collections cannot be relied on. On the accession of the British rule nearly every estate was Jageer; since then some have been resumed and others have lapsed; but even now, out of 142 villages, only 90 are Khalsa. The summary settlement was not made uniformly on any fixed principles, but the District Officer assessed each estate as it lapsed, on whatever data he was able to procure. The natural consequence of this was that the assessment is very unequal: still, it cannot by any means be generally considered high, for which it is not difficult to account. First, the estates originally Khalsa having been made over by Runjeet Sing to the proprietors at mere nominal rents, to enable them to bring them into order, their present jummas are not proportional to their productive powers. Secondly, from the position of this purgunnah and its vicinity to Lahore, it would naturally be subject to many exactions from the Seik army, and was consequently assessed at light rates. Thirdly, the cultivation has greatly extended and increased since the accession of British rule, much land formerly taken up in rukhs and game preserves having now been brought under the plough.

10.—On the whole the summary settlement may be said to have worked well: the collections have not been difficult; very slight balances have accrued; and there is no real distress. These facts, taken into consideration with those already mentioned, of the industrious castes prevailing, the cultivation being good, the produce fair, modes of traffic numerous, and markets accessible, led me to the conclusion that reduction was not necessary, and that all that remained for me to do was to equalize the jummas, and distribute the revenue more fairly over the different estates according to their condition and capabilities.

11.—For this purpose I divided off all the villages of this purgunnah into three circles, or chucks, according to their geographical position. These chucks, I must mention, were not arbitrary or fanciful ones of my making, but those well known and recognised by the people, and such as naturally suggested themselves by a reference to the topographical features of the country. They were the *Bet* or *Khadir*, composing all the estates situated on the banks of the river Ravee, and benefiting from its influence or vicinity; the *Deg*, containing the villages irrigated by the Deg Nuddee, and receiving its annual overflow; *Chuck Bangur*, comprising all the remaining estates of the purgunnah not included in either of the foregoing chucks.

12.—Having made my chucks, I then proceeded to observe and scrutinize each separately, and form my rates accordingly. In the Khadir and Bangur Chucks the summary assessment appeared on the whole very fair, perhaps rather light in the former, but still not so notoriously as to induce me to adopt rates which would impose any large enhancement. In the Deg Chuck, on the contrary, the summary jumma seemed rather high: it had been collected with difficulty in years of scarcity and drought: some of the estates were in bad order: many of the cattle had died during the year of drought. The Deg irrigation also seemed uncertain: it varied much from year to year according to the amount of rain that fell in the hills, where this stream takes its rise. Some 10 or 12 per cent. reduction appeared advisable to secure prosperity and regular collections.

13.—In determining my rates I discarded any attempt at a general classification of estates with a fixed set of rates for each class; but still I found that the same rates would not apply to all the villages comprised in one chuck. Thus in the Khadir the Sylabee land of some estates was very superior to that of others. Again, in the Deg Chuck, those estates receiving irrigation from the larger Deg were more productive than those watered by the smaller: whilst in the Bangur, those villages situated near the Bhed Nala, and occasionally obtaining irrigation from it, produced better crops than those situated high and dry, with no irrigation but that of their wells to depend on.

14.—To meet all these inequalities, therefore, I determined to divide off all the estates of each chuck into two classes, determined solely by the topographical position of the villages and the general superiority of the soil. This done, I then adopted one set of rates for each chuck, such as would provide for and meet the general wants of the villages in that chuck: and when on applying them in my mouzehwar assessment, I found that they could not in certain exceptional cases and for particular reasons be followed, I then departed from them (going above or below), giving my reasons for so doing in detail in the regular mouzehwar remarks.

15.—As regards the fixing of rates, I found that in the Khadir Chuck the following would work well:—Chahee Rs. 2-0-0, Sylabee 1-8-0, Baranee 0-12-0, Inundation 0-8-0. If rigidly enforced, they would have imposed an enhancement of some 2,500 rupees on a summary jumma of Rs. 28,726; but in working them out for each village, I found that I could not bring the jumma of the very lightly assessed estates up to that given by rates, and therefore had to forego this enhancement. In this chuck I retained the summary jumma nearly, as also in the Bangur Chuck, for which the following rates were adopted:—Chahee Rs. 1-12-0, Baranee 0-8-0, and Inundation 0-4-0. They gave a slight enhancement of Rs. 500 on the summary jumma, which, however, was not imposed. In the Chuck Deg my rates were as follows:—Chahee Rs. 2-0-0, Abee 1-8-0, Baranee and Inundation 0-8-0, which gave a reduction of Rs. 1,000, or 10 per cent. This reduction appeared necessary, for, as above stated, the estates generally were not in good order, nor is the irrigation by any means certain.

16. The fiscal results of my settlement are as follows :—

<i>Name of Chuck.</i>	<i>Produce Jumma.</i>	<i>Rate Jumma.</i>
Khadir.	29,114	31,214
Bangur.	8,334	8,747
Deg.	8,217	8,050
Total, ...	45,665	48,011

<i>Summary Jumma.</i>	<i>Proposed Jumma.</i>	<i>Percentage of reduction.</i>
28,726	28,598	...
8,252	8,245	...
9,100	8,155	10 per cent.
46,078	44,998	2½ per cent.

SETTLEMENT OFFICE,
Goojranwala,

J. H. MORRIS,
Settlement Officer.

APPENDIX II.

Remarks on the Revised Settlement and Assessment of Purgunnah Goojranwala, Zillah Goojranwala.

THE purgunnah of Goojranwala may be considered the chief purgunnah of the zillah bearing that name. It contains 310 mehals, besides 3 Government rukhs. Of these 232 are Khalsa, 8 partly Khalsa and partly Jageer, and the remaining 70 Jageer. It consists of a strip of land 36 miles in length, and from 7 to 10 in breadth, running from the south-south-west to north-north-east, and stretching from the banks of the Deg Nuddee about 20 miles to the west of Lahore, to the banks of the Chenab, at Wuzeerabad. On the north and north-east it is bounded by the purgunnahs of Duska and Pusroor, on the east by purgunnah Shahdura, on the south and south-west by Purgunnah Shekooporah, and on the west by Purgunnah Ramnuggur. The Chenab also bounds it on the north-north-west for about 8 miles.

2.—This purgunnah has only been formed within the last 18 months, and is made up of the southern portions of the two old purgunnahs of Wuzeerabad and Eminabad in Zillah Sealkote, together with a few scattered villages from Purgunnahs Shahdura, Shekooporah, and Ramnuggur. It is famous as containing the birthplace of the renowned Sikh Ruler, Runjeet Sing, and also as being the seat of many of his early exploits.

3.—It contains three large towns of importance:—*Goojranwala Khas*, which is situated in the centre of the purgunnah, and is a place of considerable importance and trade, containing a large bazaar and many fine buildings, &c. It may be considered the chief town of the zillah, and is noted as being the birthplace of the famous Sirdar Hurree Sing. *Wuzeerabad* is also a large town, situated in the northern extremity of the purgunnah, on the banks of the Chenab, and the residence of many Khuttees of note. It was much improved and added to by General Avetabile during the Sikh Rule. *Eminabad* is situated about 8 miles to the east of Goojranwala Khas. It is a very old town, has an imposing appearance, and lies on the high road from Lahore to Sealkote. We may also mention *Sodherah*, which lies in the extreme north of the purgunnah. It contains many fine buildings, and was in the Imperial times a place of considerable importance, but of late years has been gradually declining. Besides these large towns, there are many large villages of commercial note, in which traders reside, and in which there is a ready sale for grain: it will suffice to mention *Tuppealuh*, *Kamokee*, *Muraleewaluh*, *Ferozewaluh*, *Gondulanwaluh*, *Luddewaluh*, *Budokee*, *Bankee Cheemah*, *Ghukkur Cheemah*, *Nut*, and *Dhonkul*; added to which we may mention that the vicinity of the Cantonnments of Wuzeerabad and Sealkote affords good markets for the ready sale of agricultural produce.

4.—This purgunnah is traversed by several roads:—First, the Grand Trunk Road from Lahore to Peshawur, which runs through the very heart of the purgunnah, entering it at Khoree and passing through Goojranwala Khas, leaves it at Wuzeerabad: then the road from Lahore to Sealkote, as also from Lahore to Ramnuggur, both of which leave the Grand Trunk Road near Kamokee: also a road from Goojranwala to Sealkote, and another from Goojranwala to Umritsur *via* Eminabad. The following minor roads are also worthy of mention:—from Goojranwala to Ramnuggur, and from the same place to Hafizabad. Besides these large roads, small, well-defined tracks, fit for carriage, connect all the principal villages.

5.—Now as regards the agricultural commerce of this purgunnah as connected with our system of money payments: we have already noticed the existence of large towns and markets; also that roads and modes of traffic are common. So far, then, this is favorable. But when we come to look at the other features of the case, the result is not so cheering. First, the supply of grain has increased, but the demand has diminished both at home and abroad, as compared with former times: the sale therefore is not so ready, nor is the same quantity exported. Again, in proportion as the demand for cash has increased, so has the supply diminished, for now there are few or no receipts from service as formerly: also from the Government revenue being paid in cash, its value has increased, and Shahis require greater security and large interest before advancing it. Also, the natural result of the demand for grain not being proportioned to the supply, there has been a considerable fall in the prices, so that the actual money value of land has diminished. We see, then, that its roads, markets, and modes of traffic are favorable to the agricultural commerce of this purgunnah, as connected with a system of money payments, whilst the diminished demand for grain, the fall in prices, and the increased value of money have the contrary effect.

6.—We will now turn to the natural capabilities of the purgunnah, its inhabitants, agriculture, produce, soil, &c. Generally speaking, the purgunnah may be considered a good and productive one; of course inferior portions are to be met with, but they are the exception. First, its soil: this of course varies in different parts, but *Dosahee* and *Myrah*, answering to *Roslee* 1st and 2nd, are the principal soils. *Rohce*, or *Muttyar*, is also by no means uncommon, but it is found generally in small patches, not in large portions, except in the estates near the Deg Nuddee. The best soil is to be found in the north of the purgunnah, and immediately about Goojranwala Khas, and to the north and east of it: as we advance south the soil becomes inferior *Roslee*, until at last it verges into *Bhor*, or sand, and in the extreme south-west is decidedly *Kullur*, or mixed with saltpetre. Patches of *Kullur* are also to be met with all over the purgunnah. The best and worst portions of the purgunnah, with distinctions of soil, &c., will be more minutely particularized hereafter.

7.—Secondly, its produce: this is good, and all the Zubtee crops are abundantly grown. Wheat is the staple, but when artificial irrigation exists to so large an extent as it does in this purgunnah, sugarcane and all the superior crops are to be met with in almost every estate. Rice is abundantly grown in the villages situated on the banks of the Deg Nuddee, and is to be found in many scattered estates, especially those to the north, where "*chumb*" land, and small patches irrigated from ponds and nullas, are by no means uncommon. With the exception, however, of the rice of the Deg villages, and the sugarcane of some of the first-rate estates, there is nothing remarkable about the produce.

8.—Thirdly, *castes*: The good agricultural castes almost entirely prevail, i. e., *Jats* of various clans or "goths." In the north and west towards Ramnuggur are *Chuttehs* and *Cheemahs*; in the south are *Viruks* and *Khurrits*; and over the rest of the purgunnah various "goths" indiscriminately mixed up together. In some of the Deg villages *Rajpoots* are to be met with, as in Tuppealah Khas; and in a few villages bordering on Shahdurah, *Lobahnahs*. The industrious classes therefore prevailing, it follows that the agriculture is good, and that the soil is well tilled and manured. Many, however, of the present agriculturists were formerly in service, and have not yet taken kindly to the plough. It will not be long, however, before they do so, when it is to be hoped that some portion of the large amount of culturable land now lying waste will be brought under cultivation. Its existence, however, is easily accounted for by the fact that in former times the number of hands employed in agriculture was not nearly equal to the amount of land at their disposal.

9.—We now turn to the *irrigation* of this purgunnah, which exists to a very large extent, about 95 per cent. of the cultivated area being irrigated. Indeed the Baranee land is not worth notice. This purgunnah is only traversed by one stream of importance, the Deg Nuddee, which waters about 20 estates in the extreme south-west. There are also many small streams or nullas in the north. Irrigation is of three kinds, from the river and Deg, from small nullas and ponds, and from wells. The two former do not require any particular notice, but the latter is too important to be passed over.

10.—With the exception of some fifty villages, all the rest of the purgunnah is comprised in a tract well known by the name of the "*Churkuree Mehal*," denoting a tract entirely irrigated by wells. This tract takes its rise in the purgunnah of Sealkote, and after passing through Duska and Pusroor, goes through this purgunnah to those of Ramnuggur and Shekoooorah. The wells here are very superior, water very abundant, and the irrigation very superior. The cost of a good well varies from Rs. 175 to 300. When in good condition and worked by 6 or more yoke of bullocks, it will, in favorable rainy seasons, water from 30 to 40 acres a year. The superiority or otherwise of a well is reckoned by the number of yokes attached to it; and under the Sikh Rule, when money payment was made in villages in this tract, it was the almost invariable custom to assess on the number of wells and yokes of bullocks. Forty goomaos were considered the limit of the yearly cultivation under a *first-rate* well. It must, however, be borne in mind that in these 40 goomaos are grown all kinds of crops; for, as before mentioned, there is no Baranee land in this tract. Land, unless irrigated, is useless: the zemindar must therefore grow in his well land light fodder crops for his cattle, as well as superior revenue-paying crops. Hence is the great difference between this tract and other tracts with good wells, but also good Baranee land; for there we find the *well* land consisting of some 12 or 15 goomaos, all of which is capitally manured, and only growing the best Zubtee crops, with vegetables and some *first-rate* corn, whilst the inferior crops—wheat, barley, fodder for cattle, &c.—are grown with little trouble and expense in the Baranee land.

Here, however, the irrigated area is large: the zemindar is not able to manure more than *one-third* of it, or at the most *one-half*: in the remainder, therefore, will the inferior crops be grown, which require also to be well watered, and in the production of which considerable expense must be incurred, whilst the return is small. This total irrigated area, therefore, cannot pay at nearly the rates which the richly manured and small irrigated areas of tracts, as the "Durp," &c., are accustomed to be taxed at; for here the irrigated area comprises nearly the total *cultivated* area, whilst there it forms but a small portion of it. Speaking generally, I consider the return from 40 irrigated acres of the Churkurree Mehal as about equal to that from the same amount of land in the "Durp" attached to one well, of which the proportion will be 15 irrigated and 25 unirrigated. The return in the former is perhaps more certain, but then the expenses are much greater, and the profits less.

11.—We will now turn to *Assessment*:—First, the former assessment of this purgunnah under the Sikhs, of what kind, in what parts prevailed, and with what degree of accuracy. With the exception of some villages in the vicinity of Wuzecrabad, money assessments do not appear to have prevailed to any extent. Many of the estates were held in Jageer, the Jagecdar realizing in kind, and regarding whose past receipts little really trustworthy can be learnt. For the estates originally Khalsa and in which the system of Kunkoot obtained, the nominal *aieen* jummas have been received from Raja Deena Nath, but I regret to say that they have not proved of any practical use. For the estates about Wuzecrabad, lists of General Avetabile's money assessments have been furnished, but they are only of scattered estates, not for any large tract. Indeed, there does not appear to have been any past fiscal administration conducted on uniform principles, on a great scale, which would prove of any use in guiding assessment.

12.—Next comes the summary assessment. This was made by Major Lake in 1847 in the following manner:—Each Kardar was called on to furnish returns shewing the amount collected in the preceding five years. From these an average was struck, and the jumma fixed after a reduction of 10 per cent. There is no doubt but that estates that paid the Kardars well got off cheaply, whilst those who did not paid the penalty: but still, considering the uncertain data on which this assessment was made, and the very severe tests which have been applied to it, I consider that it was worked fairly. The total summary jumma was Rs. 2,03,472. In parts it was very unequal. In some estates the settlement has since broken down, and remissions have been granted, and in others the collections have been very difficult and irregular, and large balances have accrued; but when we take into consideration the great fall in prices, the late bad seasons, the unpopularity of money payments, the difficulty of raising money, &c., this is not more than what was to be expected. Until the "Khurreef" of Sumbut 1908 there had been no large balances in this purgunnah: the revenue had been collected, not always with ease, sometimes with difficulty and perhaps with too much rigour, but still without great default. That season was, however, a calamitous one, and it then became apparent that a number of villages in this purgunnah were in very bad condition, had suffered much from the severity of the assessment, and were quite unable to pay the Government demand. Orders were at once issued for investigating the condition of these villages, and ultimately remissions amounting to Rs. 15,600 were granted. That large remissions were needed, that no time was to be lost in granting them, and that the amount granted gave great relief, is quite clear; but still I am of opinion that, had the revenue been collected originally with less rigour, and the condition of the villages enquired into at first, and *timely* remissions granted, a large amount of revenue would have been saved to Government. These remissions included nearly all the distressed estates in the north of the purgunnah; in the south, however, and more especially in the vicinity of Eminabad, and below it, there still remained many poor estates in which balances had gone on accruing, desertions had taken place, wells had fallen in, and much distress prevailed. Such was the state of things up to 1910 Sumbut, when, from the total failure of the regular rains, a very severe drought occurred, the results of which were most disastrous. Villages formerly well off, and paying regularly, now got into balance. Many desertions took place; wells fell in, and the cattle died by hundreds. The number of wells deserted in one year exceeded (300) three hundred, whilst on the original summary jumma a balance of Rs. 34,854 occurred. It therefore became evident that the summary settlement must be considerably reduced to afford any hope of its working well for the future, whilst still further temporary remission for two years would be necessary to meet the necessities of the season, and efface the dire effects of the drought. After mature consideration I determined on a total reduction of about Rs. (40,000) forty thousand, and temporary remissions of Rs. (10,000) ten thousand more.

13.—So much for generals: we must now proceed to details, showing in turn the various data which I had at my command for testing this result. First, then, I determined on dividing off the purgunnah to topographical circles or chucks, each circle to possess general characteristic features of *soil, position, irrigation, &c.*, common to all the villages included in it, but not common to the other circles. On looking over the purgunnah I found that all the estates might be comprised in three circles,—one the River Chuck, or *Khadir*, containing 20 estates, and comprising all the villages near the Chenab, or in any way benefiting from its vicinity or influence; another was the *Deg* Chuck, containing 24 estates, *viz.*, those which were in any way benefitted by the waters of the Deg; the third was the large circle before referred to under the name of *Churkurree Mehal, i. e.*, villages with good well irrigation, but little or no "Baranee" land—it consists of 264 estates.

14.—With respect to the *Khadir* Chuck, not much need be said, except that this portion of the Chenab Khadir is generally inferior, the "Sylabee" being often mixed with sand, and not nearly so rich or productive as that of the Ravee. The amount of "Sylabee" is about

double that of the rest of the cultivation; the "Chahee" and "Baranee" comprising nearly equal portions of the remainder. The "Baranee" is fair, and the "Chahee" generally good, being found in estates bordering on the "Churkurree Mehal." The soil is "Myrah;" a little "Rohee" is to be found in the high land, injured in parts by "Kullur." The produce is good, wheat the staple. There are a few very greatly over-assessed estates, but the villages generally are in fair condition, with some few exceptions.

15.—Next, the *Deg Chuck*. It is very similar to the same chuck in Purgunnah Shahdurah; the best estates lie to the north, immediately adjoining the Pusroor Purgunnah. The soil deteriorates a little as we go south in the Shekoooorah direction, becoming more "Kulluratee." The soil is almost entirely "Rohee," in parts injured by "Kullur." There are two kinds of irrigation—from wells, and from the Deg by jallars; both are good, especially the latter, which is famous for its rice cultivation. Excellent wheat is also grown, but little or no sugarcane. The Zemindars are either Rajpoots or Lobanahs, with a few Jats. There is but little over-assessment, the estates generally in fair condition; a few, however, in very bad order. I have included in this chuck four estates which are entirely "Kullur," and which do not in any way benefit from the waters of the Deg; they are *Bloondree*, *Ladhokee*, *Raja*, and *Nuthranwallee*; all of them are poor estates, over-assessed, and in bad condition.

16.—Lastly, the "*Churkurree Mehal*." This is a very large chuck, comprising more than 5-6ths of the whole purgunnah: in it estates of all sorts and descriptions are to be met with, good and bad, under and over-assessed, &c., &c. The soil is of three kinds, differing in quality in different parts, "Rohee," "Dosahee," and "Myrah." The best villages lie about Goojranwala Khas, immediately to the north-east, and again across to the south-west as far as *Etawah* and *Eminabad Khas*. Also to the north-west,—that is, by drawing a line from the Wuzeerabad Cantonments across to the Duska Purgunnah, through Nuth,—the villages lying to the north of that line are superior, the soil good "Dasahee," first class "Myrah," and a little "Rohee" to the north. The soil of the generality of villages touching on Purgunnah Duska is good, and appears to deteriorate as we go south. There is a fine cluster of villages to the west and south-west of Goojranwala Khas, *i. e.*, below the line above mentioned, such as *Gondulanwaluh*, *Thuttuh*, *Cheemah*, *Kot Baree Khan*, *Luddewaluh*, &c., with superior irrigation and wells, but with soil in parts much injured by "Kullur," which may be often seen stretching for a mile or so. These, therefore, are good second class estates, among whom are some exceptions, and very superior estates, as *Buddokee* and *Bankee Cheemah*. The worst portion of the chuck is that bordering on the "Kullur" in the extreme south; also some inferior estates just to the south of Goojranwala Khas, bordering on the Shekoooorah Purgunnah, as *Khanashah*, &c., the soil being very light and sandy. I have divided the estates into three classes: this, however, is merely a soil classification, for the condition of villages, habits of the Zemindars, &c., I did not bring into my classification, but noticed separately in my assessment of each estate. The irrigation of this tract has been before noticed. The produce is good; wheat the staple, but sugarcane and all the Zubyte crops extensively grown. A little rice is also found in the north. This chuck contains nearly all the distressed estates of the purgunnah—*viz.*, those in which remissions had already been granted, as also those in which reductions were still so urgently required. The villages are generally not in good condition, whilst many are very poor, and in great distress, this being the tract where the effects of the drought were most severely felt.

17.—With these facts before me, the conclusion I finally arrived at was, that reduction was necessary all over the purgunnah, but more especially so in the Churkurree Mehal. After mature consideration it appears to me that a reduction of about 10 per cent. in the Khadir and Deg Chucks, and not less than 20 per cent. in the Churkurree Mehal, with still further temporary remissions for two years on account of the drought, ought to meet all the requirements of this tract, and in this conclusion I was borne out by my produce estimates calculated at the rate of 1-6th of the gross produce in irrigated and one-fifth in unirrigated lands, which give an amount of reduction very similar to that above proposed.

18.—Again, the rate of the summary settlement in the Deg Chuck I found to be Re. 1-15-0. This is, perhaps, rather high, but still not very much so, when we consider that nearly the entire area is irrigated. Also for the Khadir, the summary rate is Re. 1-6-0, whilst two-thirds of the cultivated area was Sylabee, and one-fifth Chahee: this is by no means an excessive rate. A reduction of 10 per cent. on these rates would be ample. I finally adopted for these two chucks the following rates:—Chuck Khadir, Chahee Re. 1-12-0; Sylabee Re. 1-4-0; Baranee Re. 0-12-0; Inundation Re. 0-8-0. Chuck Deg, Chahee Re. 2-0-0; Abee Re. 1-8-0; Baranee Re. 0-8-0; Inundation Re. 0-8-0. These I again tested in the Deg Chuck by the number of wells and ploughs, and in the Khadir by the latter only, after having ascertained that 15 rupees for a plough in both chucks, and 54 rupees per well in the Deg, were generally considered very moderate.

19.—In the assessment of the Churkurree Mehal I did not make so much use of rates on land,—they were almost unknown in, and not applicable to, this tract of country. In lieu of rates, however, I found assessment on wells and yokes greatly in vogue; the internal distribution was almost entirely on wells, and I found that the people themselves, and all other natives acquainted with the agriculture of this Doab, looked upon the number and condition of the wells, together with the number of yokes attached, as the chief index of the capacity of the estate.

20.—The relative value of good and bad wells, together with the rates applicable to each, being popularly understood, were ascertained without much difficulty. My *modus operandi*

was as follows :—I selected several average villages of each class, and ascertained carefully what a *good*, *ordinary*, and *poor* well in each could pay; also what a yoke was usually rated at. This done, I then struck an average for each class, and the result thus obtained I submitted to intelligent and trustworthy Zemindars and others: I also tested the same by applying it to several other villages.

21.—The well yoke rates finally adopted by me are as follows :—1st class well 70 Rs., yoke 20 Rs.; 2nd class well 63 Rs., yoke 18 Rs.; 3rd class well 54 Rs., yoke 15 Rs. Whole chuck, well 65 Rs., yoke 18 Rs. They bear me out in the conclusion I originally arrived at as to the total amount of reduction required for the whole chuck, and stand the test of being applied to single villages, or whole classes, reducing in the distressed or over-assessed estates, raising in those lightly assessed, and keeping the jumma in those fairly assessed.

22.—With respect to rates on land, I have already stated that they are not very applicable to this tract: still, it must not be imagined that I discarded them entirely. On the contrary, I adopted, not only irrigated and unirrigated rates for the whole chuck, but also class rates suited to the soil of each particular class of villages, which I found most useful in testing my assessment, and proving the accuracy of the results already arrived at by the aid of my other data. My rates are as follows :—1st class Chahee, Rs. 2-0-0; Baranee, Re. 0-12-0; Inundation, Re. 0-8-0;—2nd class Chahee, Re. 1-8-0; Baranee, Re. 0-12-0; Inundation, Re. 0-8-0;—3rd class Chahee, Re. 1-4-0; Baranee, Re. 0-8-0; Inundation, Re. 0-8-0; *Whole Chuck*, Chahee, Re. 1-0-0; Baranee, Re. 0-12-0; Inundation, Re. 0-8-0. These rates, especially those for the irrigated land, may perhaps appear low, but when we consider that the irrigated area on which they have been calculated is considerably over-estimated, and also, that from the absence of “Baranee” land, all crops, even including fodder for cattle, are grown on the “Chahee,” I am of opinion that any higher could not safely have been adopted.

23.—The fiscal results of my assessment are as follows :—

<i>Name of Chuk.</i>	<i>Doul Jumma.</i>	<i>Well Jumma.</i>
Deg	14,645	14,310
Khadir	6,985	...
Churkurree Mehal	1,45,661	1,44,180
Total ...	1,67,291	...

<i>Yoke Jumma.</i>	<i>Produce Jumma.</i>	<i>Rate Jumma.</i>
14,110	14,166	14,575
6,910	6,600	6,778
1,42,960	1,43,205	1,43,678
1,63,980	1,63,971	1,65,031

<i>Summary Jumma.</i>	<i>Proposed Jumma.</i>	<i>Percentage of reduction.</i>
15,956	14,282	10 per cent.
7,443	6,820	8 per cent.
1,80,073	1,43,141	20 per cent.
2,03,472	1,64,243	19½ per cent.

SETTLEMENT OFFICE,
Goojranwala.

J. H. MORRIS,
Settlement Officer.

APPENDIX III.

Remarks on the Revised Settlement and Assessment of Purgunah Ramnuggur, Zillah Goojranwala.

THE purgunnah of Ramnuggur is bounded on the north and north-east by that of Goojranwala, on the east and south-east by Shekoopoorah, on the south and south-west by the purgunnah of Hafizabad, and on the west and north-west by the river Chenab. It originally consisted of 225 villages, including two rukhs, to which 29 additional mouzahs,

formerly comprised in Purgunnah Wuzcerabad, Zillah Sealkote, and situated in the extreme north of the purgunnah, were added last year : it consequently now consists of 254 mouzahs. The boundaries are very ill-defined, some of the Ramnuggur estates being situated miles away from the main body of the purgunnah, in the middle of other purgunnahs ; whilst again, on the other hand, many estates belonging to other purgunnahs should, from their position, have been included in this one. For the purposes therefore of assessment I have brought together 263 estates : thus I have excluded 14 Ramnuggur estates (4 of which have been assessed with Goojranwala, 9 will be assessed with Shekoopoorah, and one with Hafizabad), and included 23 estates of other purgunnahs (*viz.*, 20 from Shekoopoorah, one from Goojranwala, and two from Hafizabad). These estates form a long strip of land stretching parallel to the course of the Chenab, in length about 35 miles, and in breadth varying from 20 to 4 or 5 miles.

2.—There are three entire Talooquas, *Ramnuggur*, *Akalgurh*, and *Oodhowalee* : this latter talooqua lies on the border of the Hafizabad Purgunnah, and contains only 8 villages. Besides these, many villages in the north formerly belonged to the talooqua of Wuzcerabad, in the south-east to that of Killa Mean Sing, and in the south-west to that of Kadirabad. The talooquas of Ramnuggur and Akalgurh contain about 190 villages, divided pretty equally between them.

3.—Of the towns of this purgunnah only two are worthy of note. *Ramnuggur Khas* is a good sized city, with about 9,000 inhabitants, a good bazaar, and many pukka buildings : it formerly belonged to the *Chuttehs*, a “goth” of the Jats, famous for their courage and warlike character : they were expelled and the city taken from them by Muha Sing, father of Runjeet Sing, about 50 years ago. They have never again gained possession, and at present the greater majority of the cultivating proprietors are Raiens. The other town is *Akalgurh Khas*, situated about 3 miles to the east of Ramnuggur : it is rather insignificant, but is well known as the birthplace of the famous Sawun Mull. Besides these towns, the principal markets accessible to this purgunnah are the Cantonments of Wuzcerabad, the cities of Wuzcerabad and Goojranwala, to the north and east, and the city of Hafizabad to the south. The following also may be considered large and fine estates, though they cannot rank as qusbahs,—*Kot Salem*, *Kot Hurra*, *Rankee*, *Sarokee*, *Dilawan*, *Salliokee Akmdunuggur*, *Dhutteh Chutteh*, *Man*, *Bootalah*, *Killa Mean Sing*, *Boodha Gooraya*, *Shadho Gooraya*, *Bhomah*, *Wuzirkee*, *Oodhowalee*, *Chubba*, *Achanchuk*, and *Ajeetkee*.

4.—There are several good roads,—the Lahore and Ramnuggur road *viâ* Kamokee ; the Goojranwallah and Ramnuggur road ; that from Hafizabad to Ramnuggur ; also the Wuzcerabad and Mooltan road, which passes through Ramnuggur Khas, and traverses nearly the whole length of the purgunnah from north to south. There are also three ghats on the Chenab. With respect, therefore, to the existence of markets, their accessibility, the existence of roads, means of traffic, &c., this purgunnah may be considered to be far from unfavorably situated.

5.—We will now turn to the soil and agricultural features of the purgunnah. About 66 villages are “Sylabec,” that is watered and kept moist by the Chenab. The soil is “Myrah” of various qualities, in some parts superior ; in others again light and sandy. In the rest of the purgunnah the cultivated land is of two kinds, “Rohee” and “Myrah,” the former corresponding to “Muttyar,” the latter to “Roslee” of various qualities. There are also large tracts of “Kullur” land, in many places the cultivated land being impregnated with saltpetre. The plains of “Kullur” often stretch for miles, especially towards the south of the purgunnah. In the south-western corner the frontier adjoins the “Bar,” but there are no regular “Bar” villages in this purgunnah. The best soil is to be found in the north about Wuzcerabad, &c. ; also on the north-east about Bootaluh, Man, Bhomah, &c., and on the Hafizabad road at Oodowalee, and the other estates of the so-named talooqua. Towards the south-east and south the “Myrah” prevails, as well as the “Kullur,” being sometimes light and inferior. The best soil is “Rohee” and good “Myrah,” also called “Doshee,” and the worst very inferior “Myrah,” approaching to Bhoor, and “Kullurate,” or soil much injured by saltpetre. With the exception of the “Sylabee” land, the soil of this purgunnah is inferior to that of Purgunnah Goojranwala ; doubtless many estates may be found equal, if not superior to any of the Goojranwala villages, but as a whole I think it must be considered inferior.

6.—The produce is very fair : wheat is the staple ; cotton, Indian corn, &c., also grown. Sugarcane is not grown in very large quantities, but still it is produced on almost every well. The yield of Talooqua Oodowalee is the best in the purgunnah, and very superior, the “goor” being considered first-rate : it is grown in fair quantities in the “Kullur” land, but the “goor” is considered inferior in quality. Rice is also grown : it is chiefly found in the low “Rohee” land, called “Chumb,” where the rain-waters are able to accumulate, and the soil thus becomes moistened. The villages possessing the best “Chumb” land are *Ajeetkee*, *Wuzirkee*, *Kulleanwalah*, *Ramkee*, *Chuk-gazi*, and *Huzrut-Kylanwala*. It is also grown in small quantities in well land in the “Kullur.”

7.—The Zemindars are, generally speaking, an industrious set. They are nearly all Mussulman Jats. The prevailing castes are “*Chuttehs*,” “*Cheemahs*,” and “*Tarurs* : ” the two former are found in the north of the purgunnah. There are also the following sub-divisions of the Jat tribe,—*Bhoon*, *Kurru*, *Sekhoo*, *Wirach* ; they are all good cultivators. There are also some “*Biropees*,” and a few Raiens. The industrious classes therefore prevailing, it naturally follows that the cultivation is good : the Zemindars working their wells day and night, often produce very good crops from the hard, unyielding “Kullur” soil.

8.—Irrigation is one of the most important of the agricultural features of this purgunnah. With the exception of the Bet land and a few scattered villages, little or no “*Baranee*” land

is to be met with, the productive powers of this tract of country being almost entirely dependent on irrigation. It may be divided into three classes,—irrigation from the river, "*Sylabee*;" irrigation from streams or ponds, "*Abee*;" and irrigation from wells, "*Chahée*." The first of these will be more particularly noticed in the description of the "*Khadir*" chuk. The second does not exist to any large extent; no fertilizing stream traverses this district, and although it is not uncommon to meet with small streams, rising in the high "*Kullur*" ground and emptying themselves into the low swamps, still this only benefits individual estates, not any large tract of country: it will therefore be found more particularly noticed in the separate "*Mouzelwar*" remarks. The third class of irrigation, *that from wells*, is found in every estate of the purgunnah, with the exception of a few very small villages, situated on the very banks of the Chenab, and consequently unable from their position to sink wells.

9.—Generally speaking, the well irrigation of this purgunnah is of a superior description, and in the north and east, where this purgunnah adjoins that of Goojranwala, we find a continuation of the great "*Churkurree Mehal*," or celebrated well tract. From the general inferiority of the soil, the average yield of a good well in this tract cannot be considered equal to that of one in the *Churkurree Mehal* of Goojranwala; but this arises from inferiority of soil, not of wells, as they will be found in as good order, watering as much land, and worked by as many yokes. As we proceed southwards this inferiority of soil becomes more and more visible, till at last we come to the "*Kullur*" land, where from the natural hardness and dryness of the soil, more water being required, a well is unable to water so large a yearly area. In the *Churkurree Mehal*, a *first-rate* well can water 40 goomaos in a very favorable season with the help of rain, but the *yearly* average of a good well—*i. e.*, what can be depended on from year to year without the aid of rain—ranges from 25 to 30 acres. In the "*Kullur*," a *first-rate* well will water in a favorable season about 35 goomaos, but the yearly average is from 20 to 25 goomaos. In the "*Bet*" land,—*i. e.*, where the soil is kept moist, and benefits from the vicinity of the river,—the yearly average of a well is 30 acres; but in good seasons, with the help of rain, it reaches 40 and 45 acres.

10.—The superiority or otherwise of a well depends on its condition, and the number of yokes by which it is worked. All wells worked by more than 6 pair of bullocks are considered *first-rate*; those with 5 or 6, *good*; those with 4, *ordinary*; and those with 2, *inferior*. The classification of wells by the number of yokes attached to them is well known and acknowledged all through this purgunnah, and during the Sikh rule it was very common to fix money assessments for wells, regulated by the number of yokes attached to each, and the nature of the soil.

11.—There are some peculiarities attaching to this "*Chahée*" land which distinguish it from land generally so designated in other parts of the country, and require particular notice. In common parlance, "*Chahée*" land signifies irrigated soil of a very superior description, entirely manured and producing only the first-rate crops. In most parts of the country, we find each estate has a certain amount of both *Chahée* and *Baranee* land: in the former are grown all the superior crops, from which the revenue is paid, such as sugarcane, cotton, garden produce, first-rate wheat &c.; in the latter, the inferior crops, such as common wheat, barley, various pulses, fodder for cattle, &c. In this tract of country, however, this is by no means the case. I have before stated the *Baranee* land is hardly to be met with here: it consequently follows that all that each estate must produce is produced from the *Chahée*; we therefore find the *Chahée* land producing not only the very superior crops, but also all the inferior ones, it being as essentially necessary to the zemindar to grow fodder for his cattle, and food for himself and family, as good sugarcane and cotton wherewith to pay the revenue. From the peculiar nature of the soil, these inferior crops require much labor and irrigation, the expense therefore incurred in producing them is great, whilst the actual profit is very small. In the *Durp* and other good tracts with superior *Chahée*, the average amount of land attached to a well will be 15 acres, of which 4 acres will be sugarcane, 4 of cotton, 4 of garden produce, and 3 of superior wheat. Here, on the other hand, taking 30 acres as the average *yearly* irrigated area of a well, the distribution of the crops will be as follows:—2 sugarcane, 2 cotton, 4 mukkace, 4 churree, 10 wheat, 4 gojee, 2 barley, 1 turnips, and one garden produce. It is therefore manifest that the average yield of an acre of the former will be double that of the latter.

12.—Again, in the *Durp* and elsewhere, from the superiority of soil, and the large amount of manure given, land does not require to lie fallow: the amount of *Chahée* therefore attached to a well represents actually the amount of land yearly irrigated by that well. But here this is by no means the case; many wells have much fallow land attached to them, whilst others again have none; in some, the amount of *Chahée* entered against a well signifies the *yearly* irrigated area; in others, the area irrigated in two years, one-half lying fallow; whilst in others again two-thirds will be irrigated each year and one-third lie fallow. The amount of fallow *Chahée* in each estate is thus determined:—first ascertain the yearly average of a well, multiply that into the number of wells, and the amount by which the result thus obtained is exceeded by the amount of *Chahée* entered in the *Khusreh* is the quantity of fallow. Thus an estate with 6 wells, each watering 30 acres yearly, has 250 acres entered in the *Khusreh* as its irrigated area: in this case 180 acres (6×30) will represent the amount of land yearly irrigated, and 70 acres ($250 - 180$) what lies fallow each year.

13.—We must now proceed to notice the various tracts or circles into which this purgunnah may be topographically arranged. They are three,—the *Khadir*, *Kullur*, and *Churkurree Mehals*.

14.—*Khadir* or *Bet* chuk comprises the estates situated on the banks of the Chenab or influenced by its vicinity: it consists of 66 estates, nearly all of which have more or less of *Sylabee* land. From Wuzoorabad to Sealkote, the *Sylabee* is inferior, a high bank stretching almost to the

edge of the river, and thus preventing the yearly fertilizing overflow: from Sealkote to the extreme end of the purgunnah this obstacle ceases to exist, and the Sylabee is consequently superior. This Sylabee is decidedly better than that of the Goojranwala Purgunnah, but not equal to that of the Beas or Ravee, the Chenab not being a very fertilizing river, often leaving sand in its track. The well land of this tract is good, and the Baranee very fair. In the south, in the neighbourhood of *Mullahamwala*, &c., there are some good-sized belas, affording capital pasturage ground, from which the Kardars were formerly in the habit of exacting trinnee or pasturage dues. The estates are generally fairly off; a few only have suffered from the diluvion. Some are superior, as Salhokee, Kot Hurreh, Kot Salem, Chunnee Geolah, &c. The proprietors are Chuttehs and Tarurs, with a few Biropcas and others of the Jat caste. The bustees in the Sylabee tract are called chuunces: they are rather liable to be washed away. The soil and produce are good; wheat is the staple. Good sugarcane is found on the well land, but not in the Sylabee. Cotton and the other superior crops are grown in fair quantities.

15.—The *Kullur* chuk commences to the north of Akalpurh Khas, and reaches to the Hafizabad frontier. As its name denotes, its soil is much impregnated and deteriorated by saltpetre: the soil is naturally good Rohce and superior Myrah, but the existence of the Kullur renders it very hard and unyielding, which greatly increases the expenses of cultivation, very superior bullocks being required for the ploughs, and more water from the wells, to render the land productive. The produce is good, but the expenses incurred are so great, that the actual profits to the cultivators are small. Sugarcane is grown in appearance very fine, but the sweetness of the cane is much injured by the saltpetre. Wheat is the staple, of very good quality. Indian corn, cotton and all other crops are grown in moderate quantities. Almost the entire area is irrigated from wells. There is very little Baranee land worth notice, but some few estates have good Chumb land, producing very fair rice. Towards the east and north are some Myrah estates which have been included in this chuk: their soil is generally light and inferior to those of the Kullur tract, but not injured by saltpetre, which more than compensates for the slight inferiority of soil. The expenses of cultivation are also less than in real Kullur estates; the wells are good, and some estates have very fair Baranee land. The prevailing castes in this chuk are *Chuttehs* and *Cheemas*.

16.—The third chuk is the *Churkurree Mehal*, which will only require passing notice here, having been fully described in the remark on the Goojranwala Purgunnah. Generally speaking, this tract in Purgunnah Ramnuggur is not equal to that in Purgunnah Goojranwala; still, many estates may be found equal, if not superior, to any in Goojranwala. The finest estates are found in the north, near the Wazirabad Cantonments, as *Sarskee*, *Ahmudnuggur*, *Munsoorwalee*, &c., and to the south-east, in the Oodowalee talooqua, where the wells are very superior, the soil fine, and the produce first rate; also about Man, Kot Beewanee Doss, and Killa Mean Sing. There are no very inferior estates in this tract, as in Purgunnah Goojranwala, all such having been included in the Kullur chuk. Almost the entire area is irrigated: there is, however, some fair Baranee land to be found in the estates about Sadho Gooraya, Kutta Gooraya, &c. The soil and produce are good. Much sugarcane is grown, that of Oodowalee Ilaqula being considered first-rate. Much garden produce also in the estates near the cantonments; cotton, tobacco, and all other superior crops in fair quantities. Wheat and sugarcane are the staples, and some rice is found in estates with chumb land. Many of the wells are first-rate, and the cultivation good, almost all the proprietors being of the industrious classes. In the north are found Cheemahs and a few Chuttehs; in the east and south-east, various sub-divisions of the Jat tribe. The estates are generally large, and would have been flourishing but for the disastrous effects of the late drought.

17.—We will now turn to *data for assessment*.—Having been unable to procure any old data of former assessments on which reliance could be placed, I have been obliged to avail myself of local data: these are, estimates from produce, rates on wells, rates on ploughs, and rates on soil. The first was obtained by a valuation of the average gross produce of each estate contained in the Jinswars, of which one-fifth was considered as the Government share in the Baranee and Sylabee lands, and one-sixth in well land, the expenses in the latter being so much greater than in the former.

18.—The second, *rates on wells*, is a mode of assessment well known in this part of the country, so that I have succeeded in obtaining what are considered by the people and former rulers of the country fair money values for wells of different capabilities in different parts of the purgunnah. Thus, in the *Churkurree Mehal* a first-rate well can pay Rs. 90; a good average well, Rs. 70; and an inferior one, about Rs. 40,—the average in the whole chuk being about Rs. 65. In the *Kullur chuk* very good wells range from Rs. 70 to Rs. 80; average wells from Rs. 45 to Rs. 55; and very inferior from Rs. 20 to Rs. 30,—the average on the whole chuk being about Rs. 50. In the Myrah estates, inferior Churkurree Mehal, or superior Kullur, the average is about Rs. 55. So again with ploughs, the average in the Churkurree Mehal being from Rs. 17 to Rs. 20; and in the Kullur chuk from Rs. 15 to Rs. 17.

19.—In the Bet, or Khadir, assessment on wells was not so feasible, in consequence of the existence of much Sylabee and Baranee land, independent of well land. Here, then, I adopted soil rates, the zemindars themselves confessing that from 1-8 to 1-12 for good Sylabee, and 1-4 to 1-8 for inferior, was a very reasonable and light rate. The average on a well in the Bet is from Rs. 65 to Rs. 70. Good wells can pay Rs. 80, and inferior about Rs. 50. The average on a plough is from Rs. 18 to Rs. 20. The reason why I have not made much use of rates in the Churkurree Mehal and Kullur chuks has been fully detailed in my remarks on Purgunnah Goojranwala.

20.—So much for proposed rates. We will now turn to the Summary Settlement which was made by Mr. Cocks and Major Lake in 1847-48. Returns were given in by different *kardars* of the past five years' collections; on them an average was struck, and the jumma fixed after a reduction of 10 per cent. The assessment thus made was then considered moderate, and worked fairly for the first three or four years; but since then it has begun to press heavily on many estates, more especially last year, when, in consequence of the excessive drought, the cattle died by hundreds, many wells were thrown out of cultivation, and *assamees* deserted in considerable numbers. As a general rule the *zemindars* were formerly contented, and the revenue was collected without much difficulty; but since the drought there has been much distress, complaints have been loud, desertions numerous, wells have fallen in, and balances accrued.

21.—Since the Summary Settlement many *jagheer* estates have lapsed, which obtained light jummas, in consequence of accurate data for assessment not being procurable. Last year orders were issued for a revision of the jummas in these estates. The consequence was, an enhancement by the District Officer in conjunction with myself in 40 estates,—*viz.*, 21 of *chuk Khadir*, 10 of *chuk Churkuree Mehal*, and 9 of *chuk Kullur*. This took place prior to the occurrence of the late drought, and my opinion now is that, in some instances, this enhancement was unadvisable. The former jummas had never been really tested by a season of real scarcity, and when one did come, it became evident that, in some instances, so far from the former jummas being too high, they even could not be collected.

22.—The summary jumma on the whole must now be considered high: originally it was not so, but the effects of the late drought have been so disastrous, that it will take years for the *purgunnah* to recover its former condition. There is now distress, collections have been difficult, balances have accrued, the proprietors are poor, wells have fallen in, cattle have died, and desertions have taken place. Notwithstanding that the soil and produce are fair, the industrious classes prevail, roads are good and markets accessible, still it is manifest that considerable reduction is necessary, with still further temporary remissions for two years, to meet the present exigencies.

23.—The only point now remaining to be determined on, is the total amount of reduction requisite, and its distribution over the several *chuks*. First, the *Khadir Chuk*: the *Khalsa* jumma is Rs. 32,116, at the rate of 1-7-10 on cultivation: this is a very fair rate. The original summary jumma had, however, been increased by Rs. 3,445, or more than 10 per cent. This increase was too severe: enhancement was necessary in some, but not in all the estates on which it was imposed. The estates with much *Sylabee* I found in good condition: they had not suffered much from the late drought. Those situated high and dependent on wells for their irrigation were, on the contrary, in bad order. Wells had fallen in, cattle had died, and some desertions had even taken place in these estates; therefore reduction appeared necessary, and still further temporary remissions advisable. The jumma by produce estimates comes to Rs. 32,326. On the whole it appeared to me, that if a slight reduction of Rs. 2,000 or so was allowed in the summary assessment, with temporary remissions of about Rs. 2,000 more for two years on account of the distress caused by the drought, all the requirements of this tract would be met. The following are the rates I ultimately adopted:—*Chahee* Rs. 2; *Sylabee* Re. 1-8-0; *Baranee* Re. 1; *Inundation* As. 8. A well Rs. 66. A yoke Rs. 17.

24.—*Chuk Kullur*.—The summary jumma is Rs. 28,000. It has been collected with great difficulty of late years, and during the year of drought a balance of Rs. 5,000 had accumulated. There was considerable distress; many desertions had taken place; some 70 wells had fallen in during the year of drought; and the cattle had died in such number that the average of yokes on each well had been reduced to 3 (three). We have already seen that Rs. 50 a well and Rs. 16 a yoke is a very fair average for the whole *chuk*. At these rates we get well jumma Rs. 21,000, and a yoke jumma Rs. 20,728, whilst produce jumma is Rs. 23,115. Looking at these rates, and calculating on an enhancement of Rs. 2,000 on the above well jumma on account of *Baranee* land, reduction down to Rs. 23,000—*i. e.*, a permanent reduction of Rs. 5,300, at the rate of 1-8 per cent., with still further temporary reduction for two years at 1-0 per cent. more—did not appear to me more than was absolutely necessary to bring this tract again into order. The following rates were finally adopted:—in *Chahee* Re. 1-4-0; *Baranee* As. 8; *Inundation* As. 4.

25.—*Churkuree Mehal*.—This is a continuation of the tract so named in the *Goojranwala Purgunnah*. I found it in bad condition, having suffered considerably from the late drought. Some 100 wells had fallen in during one year, and the average number of yokes to each well was only 3. The present *Khalsa* jumma was Rs. 70,500: this had been collected with considerable difficulty, especially last year, when a balance of Rs. 6,500 had occurred. We have already seen that Rs. 66 per well, and Rs. 20 per yoke are fair rates. Calculating at these, we get, well jumma Rs. 63,096, and yoke jumma Rs. 62,700, whilst produce estimates give Rs. 64,158. After due consideration, it seemed to me that a permanent reduction of Rs. 7,000, at the rate of 10 per cent., with a still further temporary reduction for 2 years of 10 cent. more, would meet all the requirements of this tract. The rates ultimately adopted by me were—*Chahee* Re. 1-8-0; *Baranee* As. 12; *Inundation* As. 8.

26.—The fiscal results are as follows:—

<i>Name of Chuk.</i>	<i>Doul Jumma.</i>	<i>Well Jumma.</i>	<i>Yoke Jumma.</i>	<i>Produce Jumma.</i>
Khadir	31,236	...	30,232	23,226
Kullur	23,220	21,000	20,728	23,115
Churkures Mehal	63,958	63,096	62,700	64,158
Total	1,18,414	...	1,13,660	1,19,599

<i>Rate Jumma.</i>	<i>Summary Jumma.</i>	<i>Produce Jumma.</i>	<i>Percentage of Reduction.</i>
31,034	23,116	30,128	6 per cent.
23,235	28,000	22,720	20 per cent. nearly.
63,838	70,475	63,795	9 per cent.
1,18,107	1,30,591	1,16,643	10½ per cent.

SETTLEMENT OFFICE,
GOOJRANWALLAH. }

J. H. MORRIS,
Settlement Officer.

APPENDIX IV.

Remarks on the Revised Settlement and Assessment of Purgunnah Hafizabad, Zillah Goojranwala.

THE purgunnah of Hafizabad is the smallest of the four tehseels which comprise the District of Goojranwala. It is a large strip of land situated in the south of the zillah, in length about 40 miles, and in breadth varying from 40 to 20 miles. It is bounded on the north by the Ramnuggur Purgunnah; on the east by that of Shekoopoorah; on the south by the Purgunnah of Cheniot, Zillah Jhung; and on the west by the river Chenab.

2.—It may be generally described as comprising two large divisions,—one embracing all the estates which have had from time immemorial their fixed boundaries, and paid revenue only in the form of a land tax, properly so called; the other consisting of those villages which have been long accustomed to pay, in addition to the ordinary land tax on cultivated land, a grazing tax for the right of pasturing their cattle on the Government preserves. The former is generally called the “Des,” and the latter the “Bar.”

3.—At present our attention will be confined to the Des, which, as above described, comprises a tract of country whose inhabitants are, strictly speaking, agriculturists, and not graziers. It consists of 220 villages—200 Khalsa and 20 Jageer—and is a strip of land stretching parallel with the river, and bounded all along its extreme boundary by the Bar. Its greatest breadth is to the north, where it adjoins the Ramnuggur and Shekoopoorah Purgunnahs; and its least, to the extreme south, where it borders on Cheniot, and consists of a mere fringe of cultivation, only a few miles broad, the Bar here extending to within three or four miles of the Chenab.

4.—For the purposes of assessment, this division, or Des, may be subdivided into three smaller portions, or *chuks*, from their topographical position:—First, the *Khadir*, comprising all the river villages, as well as those which, though not actually situated on the banks of the Chenab, still benefit from its vicinity by having their soil generally kept moist by fertilizing nalas, as well as by water in the wells close to the surface. Secondly, the *Bangur*, or strip of land lying next to, and parallel with the Khadir; here the soil does not partake of the natural fertility of the Khadir, nor is it materially injured by too close a proximity to the Bar. Thirdly, the “*chuk adjoining Bar*,” or all those estates which lie close to the Bar, where the wells become few and scattered; the water lies at a considerable depth from the surface; and the general character of the estate is materially influenced by the vicinity of the Bar.

5.—This purgunnah, exclusive of the Bar, consists of six talooquas,—*Vunekee*, which lies to the extreme north, and nearly all the estates of which are comprised in the Khadir *chuk*; *Hafizabad*, to the north-west, being situated almost entirely in the “*chuk adjoining Bar*,” *Chuk Bhutte*, so named from a large village situated on the banks of the Chenab about 12 miles below Vunekee; its estates are distributed between the Khadir and Bangur; *Jellalpoor*, about the centre of the purgunnah, almost entirely Bangur; *Rampoor*, verging to the south, nearly all, with the exception of a few good Khadir estates, in the “*chuk adjoining Bar*,” and *Pindee Bhuttean*, to the extreme south, with the estates belonging to all the three *chuks*.

6.—The prevailing castes are Mussulman Jats, by no means industrious, and formerly very much addicted to thieving and dacoity. They are also a most improvident set, expending large sums on their marriages, &c., whilst to pay the Government revenue they have recourse to Sohokars, who will only advance money at exorbitant rates of interest. The principal

sub-divisions of this caste are *Tarurs*, *Gonduls*, and *Bhuttees*. The *Tarurs* abound in Talooquas Vunekee and Rampoor, and are almost invariably lazy, idle, and troublesome. I must, however, make an exception of Ahmud Khan, of Kolo, who is a most respectable and influential choudree, an excellent malgozar, and who has kept all his villages in good condition, whilst all his neighbors around him have done their best to ruin their villages, in order to gain at the settlement. The *Gonduls* are a very respectable class of men, and fair malgozars. They abound chiefly about *Kot Gozee*, *Kot Ghurree*, *Kot Alim*, &c. The *Bhuttees* were formerly men of considerable influence, and in the imperial times were the chiefs of a large tract of country, chiefly about *Jellalpoor* and *Pindee*, which they still hold in zemindaree tenure, as also *chuk Bhuttee*. They are average malgozars, but by no means first-rate; under the Seikhs many were notorious thieves, always plundering their hereditary enemies the *Virucks*, who retaliated in return whenever they could get an opportunity. The remaining talooqua of Hafizabad consists of various castes of Jats, together with a few Khuttees, Raiens, &c. There is also much variation of caste in scattered estates of Talooquas *chuk Bhuttee* and *Jellalpoor*.

7.—The soil is Myrah chiefly, varying much in quality, but generally speaking superior in the north of the purgunnah to that in the south. I consider the soil generally of this purgunnah as decidedly inferior to that of Ramnuggur; it is much impregnated with saltpetre, —so much so that at times the ground has the appearance of being covered with a hard white frost. The zemindars do not appear to make use of any antidote to counteract this, nor indeed in reality does this Kullur appear to have so injurious an effect on the crop as I should have expected. I have repeatedly seen very average crops standing on soil nearly white with saltpetre deposits. There are also some Rohee patches scattered over the purgunnah, but this is a description of soil ill-suited to this part of the country, being dependent on falls of rain, which are indeed few and far between here. Generally speaking, I consider that the best soil is to be found in Talooquas *Vunekee* and *chuk Bhuttee*, and the river villages of Talooqua *Rampoor*; and the worst in the villages in the *chuk* "adjoining Bar."

8.—The cultivation is fair, but by no means first-rate: in the hands of a really industrious class the produce would be far superior to what we now see. The zemindars are very assiduous in watering the land well, as this costs them very little bodily labor, but fail in ploughing up the soil efficiently, working out the weeds, &c., on which, after all, the real superiority of the crops depend. Manure is used for the superior crops, but it is spread in a loose, careless way over the soil, and consequently is not nearly so beneficial as it ought to be. It is in the niceties of farming that the zemindars here so utterly fail. With respect to the produce, every kind of crop is grown, but the superior crops in only small quantities: in almost every village is sugarcane to be seen, but in only a very few will really good sugarcane be found growing in considerable quantities: the talooquas and estates especially alluded to above as having the best soil, grow the best cane. Cotton, mukkaee, joar, &c., in the khurreef, and wheat, barley, gram, vegetables, &c., are all grown; also rice and moth in the Rohee; these, however, are very uncertain crops, being, as abovementioned, almost entirely dependent on the rains. Every well also grows its crop of turnips, used as fodder for cattle. This was never taxed by Dewan Sawun Mull, and was generally exempted by all the Sikh Kardars.

9.—This purgunnah is not traversed by any large stream or canal; a few fertilizing nullas flow in some miles from the river, benefiting the estates through which they pass, but they do not deserve any distinct enumeration, having been separately noticed in the Mouzelwar remarks. The purgunnah therefore may be said to be almost entirely dependent for irrigation on either the annual overflow from the river, or artificial irrigation from wells. The "Sylabee" land, or that regularly watered by the river, is of fair quality, but inferior to that of Purgunnah Ramnuggur. It has deteriorated much of late years, especially on the north of the purgunnah, in Talooqua Vunekee, in consequence of the deflection of the river from its old course. Much land formerly regularly moistened, and looked on as good "Sylabee," cannot now be considered much superior to "Baraneo," and two or three fertilizing nullas, formerly full of water, have been quite dry for the last three or four years. The Chenab is by no means a fertilizing stream, as it often deposits much sand in its course; it is also continually changing its channel, thereby injuring many estates, without bestowing corresponding benefit on others. The "Sylabee" in *chuk Bhuttee*, *Kot Gozee*, *Ghurree*, and other estates below these, is at present good, the present season having proved very favorable for them; but it is so little to be depended on, and changes its quality so from year to year, that in fixing money payments extending over a series of years, none but very light rates appeared advisable. The "Sylabee" comprises 12 per cent. of the cultivated area of the whole purgunnah.

10.—The "Chahee" land, or that watered by wells, is very similar to that of Purgunnah Ramnuggur, which having been before fully described, needs only a slight mention here. It exists largely, being 62 per cent. of the cultivated area, and with the land "lately abandoned," of which the greater portion is "Chahee," amounts to 79 per cent. With the exception of the "Sylabee," almost all the rest of the cultivation is dependent on this artificial irrigation, and, in consequence of the great scarcity of rain, and the general inferiority and hardness of the soil, hardly any crop, however inferior, can be grown without its aid. The value of each well, and the amount of land annually irrigated from it, varies much, being dependent on the condition of the well, the number of yokes attached to it, the nature of the soil, the depth of water, &c. Before making my assessment, I endeavored to ascertain each and all of these points regarding each well separately, and then divided all the wells of each estate into three separate classes of *good*, *ordinary*, and *poor*, answering to 1st, 2nd, and 3rd classes. The position of each well being thus determined according to its condition, &c., I then obtained, by adding up the totals of each class of well,—first, the total number of each class of wells in each *chuk*, and secondly,

in the whole purgunnah. On looking to the latter I found that the proportion which the first good class wells bore to the remainder was as 9 to 11,—certainly not a very favorable result. Notwithstanding that many considerations would enter into this classification, determining the value of the well, still the chief points I here looked at were, the *condition* of the well, and the *number of yokes attached to it* : all considerations of soil, depth of water, &c., were generally disposed of in the *Chukbundee*, as also in the classification of estates, though of course they were not lost sight of here. The average amount of land attached to each well is about 40 acres, of which somewhat more than half, or about 25 acres, may be safely reckoned on as irrigated and cultivated *yearly*. This applies to seasons with little or no rains, but in favorable rainy seasons the area *yearly* irrigated will be as much as 30 acres, and in good soil, and *good* wells worked by six or more yokes of oxen in the Khadir or Bangur, as much as 40 acres or more. The percentages of *good*, *average*, and *poor* wells, 1st, 2nd, and 3rd class, in the whole purgunnah are 4,535,20.

11.—The amount of "Baranee" land as given in the measurement returns is 9 per cent. of the cultivation. This appears to me over-estimated, as "Baranee" land is very little known in the purgunnah, except the "Rohee" above-mentioned, on which little or no dependence can be placed, except in very favorable rainy seasons. The amount of land *lately abandoned* is 17 per cent. of the cultivated area: this appears a very large proportion, and points to over-assessment. The amount of culturable land is also very great, being 58 per cent. of the Malgoozaree area, whilst the *cultivated* is only 42 per cent.

12.—There are in this purgunnah only two towns deserving the name of quesbah,—*Hafizabad* and *Pindee Bhutteean* : they are neither of them places of any importance, nor can trade be said to flourish in either. The chief estates deserving notice besides these are *Vunekee*, *Behheh*, *Ahmudyar*, *Kolo*, *Chuk Bhuttee*, *Jelalpoor*, *Rampoor* (now fast declining), *Hurdo Kot Guzee*, *Ghurree*, &c. Each of these contains a small bazaar, sufficient to supply the wants of its population, but there is in this purgunnah a total absence of good available markets for the sale of produce, &c. Each village has its own separate Shah, from whom the zemindars borrow cash to pay the revenue at exorbitant rates of interest, and who takes good care to be no loser if repaid in kind. Little or no use appears to be made of the Chenab as a means of exporting produce, &c., so that at present the commercial prosperity of the purgunnah must be considered as at a low ebb. The purgunnah is traversed by two roads,—one from Wuzeerabad to Mooltan, entering it at Vunekee, and leaving at Pindee Bhutteean; the other from Lahore to Shahpoor, which runs through the southern portion of the purgunnah by Kangah Dogran, Sukhekee and Pindee. Although this purgunnah has not suffered in an equal degree to those of Goojranwala, Duska, &c., from the fall in prices, in consequence of its distance from and former inaccessibility to Lahore and the other various head-quarters of the Sikh army, still the prices have fallen considerably since the imposition of the summary assessment,—an important fact not to be lost sight of when the propriety of retaining or reducing the present jumna comes to be taken into consideration.

13.—We will now turn to the past history of the purgunnah. Since the accession of the Sikhs, there have been three distinct Sikh rulers, who have each governed the purgunnah in turn, and collected the Government revenue,—1st, *Dull Sing*, Kulleeenwalah, who is spoken of as a mild and just ruler, and under whom the country flourished. After him came *Goolab Sing*, the present ruler of Cashmere; he is always described as harsh and severe, collecting the revenue with the utmost rigour, and at very high rates. Then *Deewan Sawun Mull*, as was his practice, introduced light and equitable rates, and collected the revenue with mildness; he however only continued for a year and a half, when the purgunnah was again made over to Goolab Sing, to the severity of whose exactions may be traced much of the distress which at present exists. Under all these rulers the mode of fixing the revenue was either by appraisement of the crop (*Kun*), which was most usual in the low land, "Sylabee," or else by a fixed rate on each yoke of oxen attached to a well, which generally obtained in the high land. Fixed money rates on the soil were quite unknown, except in the "Baranee" land. When the zemindars wished for money payments on the "Sylabee," the assessment was at a fixed rate per yoke or plough. It was also not unusual to assess each well separately, for which a distinct "puttah" was given; indeed, with Sawun Mull this was his almost invariable practice with respect to villages situated in, or bordering on, the "Bar."

14.—The following are some of the rates which obtained under the Sikh Kardars. In Talooquas *Vunekee* and *Chuk Bhuttee* the rate on each yoke was 25 rupees. Under Goolab Sing and his Kardars it was also not unusual to assess good wells, worked by six or more yokes of oxen, at 150 rupees; or if the assessment was made on yokes, a good well worked by 8 yokes would pay as much as 200 rupees—certainly a very high rate. These rates also prevailed in almost all the river villages not paying by "Kun." Sawun Mull, however, reduced them from 25 to 17 rupees, which appears very moderate in comparison. In the talooquas *Rampoor* and *Jelalpoor*, and in the Bangur villages, the rate was 17 rupees per yoke, by which a good well would pay about 100 rupees. In Talooqua *Hafizabad*, the rate per yoke was 14 rupees, and generally throughout the whole purgunnah for villages bordering on the "Bar," Sawun Mull's rates varied from 14 to 12 rupees. If the assessment in the Bar was separately fixed on each well, it was under Sawun Mull at the rate of 62 rupees for every good well worked by 6 yokes. This, however, was only the Government revenue,—the extra dues, "*abwab*," invariably mounted up to 8 or 10 rupees more, bringing up the well assessment to 70 rupees and upwards. So much for *old* wells. For *new* wells the Dewan invariably gave liberal "*inam*," as much as $\frac{1}{4}$ and $\frac{1}{2}$ being held rent-free for a certain number of years. For

"Baranee" land growing *moth*, &c., the rate was 2 annas per kunnal, or one rupee per acre. The mode of assessing it was as follows:—When the grain was quite ripe and fit to be cut, the whole land originally sown was measured, and allowance having been made for all inferior and bad soil, scanty crops or waste (*nabood*), as well as for all that was used or required as fodder for cattle (*cheraitee*), the remainder was taxed at the above rate. On an average one-fourth of the land originally sown was thus exempted, so that on all the land round, the tax did not fall at more than 12 annas an acre.

15.—The summary settlement was made by Mr. Cocks in the year 1847-48; his mode of proceeding was as follows:—A list of the collections for the past five years was obtained for each estate separately; on these the average was struck, and the jumma fixed after a reduction of 10 per cent. The assessment was made for three years, but it was continued to run on till the present year with some few alterations, a few villages notoriously under-assessed having been raised, and remissions granted in those which were suffering greatly from over-assessment. With the exception of Talooqua Vunkee, Mr. Cocks' assessment may be considered to have been very fair at the time it was fixed, and for some years it was collected almost without balance. Within the last two or three years, however, collections have become more and more difficult, consequent on the fall in prices, bad seasons, deterioration of *Sylabee*, &c., so that at last remissions became absolutely necessary in order to save the estates from actual ruin, which amounted last year to Rs. 3,300, or more than 4 per cent. of the collections.

16.—I visited this purgunnah in the cold weather of 1852-53, and although the preceding rains had been very favorable, still I even then found considerable distress, more especially in the Talooqua Vunkee, and in many of the small villages bordering on the Bar. This year however the rains have unfortunately been very scanty, so much so, that in all except the Khadir estates there has been an almost total failure of the "Khurreef," and the future prospects for the "Rubbee" are very gloomy. Many of the small estates, before in distress and suffering from over-assessment, are now almost entirely deserted, all the assamees having absconded, and in some cases even the proprietors and lumberdars. I also now became more alive to the important fact, that the productive powers of this purgunnah, which apparently appears almost entirely irrigated artificially from wells, and thus one would imagine would be in a great measure independent of the seasons, are still very greatly affected by, and dependent on, rains, for now I see wells, which last year were irrigating from 25 to 30 acres, only able to water from 15 to 20.

17.—These facts, together with the following considerations, *viz.*, the lazy habits and thievish propensities of the zemindars, the undue preponderance of poor wells, the deterioration of the "Sylabee," the large percentage of land "lately abandoned," the present drought, and the total failure of the Khurreef, the balances and remissions, the absence of accessible markets, the languishing state of commerce and the fall in prices, proved to me that considerable reduction, even more than I had originally determined on, was absolutely necessary in order to ensure the future prosperity of the purgunnah, and the regular payment of the government revenue; and after much consideration I resolved to reduce from 15 to 20 per cent of the original jumma.

18.—Having thus fixed on *approximately* the total amount of reduction required, I will now proceed to show how the distribution of this reduction over the several chuks, classes, and estates was regulated, *i. e.*, what were my *data for assessment*, and how in working them out for each estate separately, and then for each chuck, and fixing thereby the amount of revenue each ought to pay, I was enabled, by summing all the totals thus obtained, to verify the general conclusion I had before arrived at of the total amount of reduction necessary.

19.—I have before described the purgunnah as divided topographically into three chuks,—the *Khadir*, the *Bangur*, and the *Adjoining Bar*,—differing materially from each other in soil, produce, depth of water, and other considerations which materially affect assessment. I have also shown the former mode of assessment and its general results, *viz.*, that rates on land were almost unknown, whilst rates on wells, and also on yokes were universally recognized (modes of assessments at present in force, and in accordance with which the village "Bach" is even now invariably made). I also gave the various rates current under the different Seikh rulers, and in the different talooquas, showing that those enforced by Golab Sing were almost invariably high and caused ruin, while those of Sawun Mull were moderate, and ensured prosperity. I also showed that I had been at some trouble to obtain a correct account of the condition of each well in every estate, with an accurate return of the number of yokes attached to each, and that then I had divided them into three classes, *viz.*, 1st class or *good*, for all wells worked by six yokes of oxen or more; 2nd class or *ordinary*, for those worked by 4 yokes or more; and 3rd class or *poor*, for three yokes or under. Now it is manifest that having thus obtained accurately the condition of every well and classified them accordingly, and also an accurate return of the number of yokes in each estate, if I could then succeed in fixing on what would be universally considered as light and moderate rates for each class of well—for each chuck separately, as well as for each yoke,—I should then have advanced far towards obtaining what may be justly considered a light and moderate jumma.

20.—After due consideration and comparison of all the former rates prevalent in the various talooquas, as well as reflection on the general results of ruin or prosperity caused by each, and consultation with the various zemindars and chowdrees, I fixed on the following as moderate rates for each chuck:—

	<i>I Class.</i>	<i>II Class.</i>	<i>III Class.</i>	
<i>Khadir</i> , well rates	100	65	35	per yoke Rs. 17
<i>Bangur</i> , well rates	80	52	25	per yoke Rs. 14
<i>Adjoining Bar</i> , well rates	70	45	23	per yoke Rs. 12

Also that fair average rates for all wells in each *chuk* would be,—*Khadir* Rs. 65, *Bangur* Rs. 55, *Adjoining Bar* Rs. 50. I then turned to rates on land. I have above shown that precise rates for each kind of soil are not applicable to this *purgunnah*: still general rates for each *chuk*,—on “irrigated,” “*Sylabee*,” “*Baranee*,” &c.—appeared very useful, more especially as a test and check on my well and yoke *jummas*, and I accordingly adopted the following:—

<i>Deducted revenue rates.</i>	<i>Chuk.</i>	<i>Sylabee.</i>	<i>Baranee.</i>	<i>Irrigated.</i>
<i>Khadir</i>	1-12-0	1-6-0	0-8-0	0-4-0
<i>Bangur</i>	1-8-0	...	0-8-0	0-4-0
<i>Adjoining Bar</i>	1-2-0	...	0-8-0	0-4-0

I also classified my estates, and though I did not adopt separate rates for each class, still in first class villages I considered myself at liberty to go above my rates, and in second class villages below them. For the “*Sylabee*,” on account of its varying so much in quality, I had these separate rates of 1-8-0, 1-4-0, and 1-0-0. Next came *produce estimates* for each estate separately, and also for each *chuk*, calculated at one-fifth of the average gross produce for the “*Sylabee*,” and one-sixth in *Chahee* and all other land. Lastly the “*Doul*” of the *tehseldar*, an officer possessing considerable ability in revenue matters, who had been in charge of the *purgunnah* ever since annexation, and possessed a most intimate acquaintance with each estate, its condition, number of wells, &c.

21.—With the above data, I turned to review each *chuk* separately. First came the *Khadir*. This contained *Talooqua Vunekee*, notoriously over-assessed: the whole *chuk* has also suffered from deterioration of the “*Sylabee*.” There had been balances and remissions amounting to more than 5 per cent; all the *jummas* calculated at the above rates gave large reduction, varying from 15 to 20 per cent.; the percentage of land “lately abandoned” was very large; and there was general distress and dissatisfaction. I determined, therefore, to reduce nearly 20 per cent. of the original *jumma*. Next came *chuk Bangur*. This was in better condition than the preceding, neither was there much balance, nor did the various rates and data for assessment give much reduction, still, as the amount of land “lately abandoned” was large, the *chuk* had suffered much from the late drought, and was dependent a good deal for its prosperity on rain, I deemed it prudent to give 10 or 12 per cent. reduction. Thirdly, *chuk adjoining Bar*. This was in a worse condition than any; the estates were almost all small; they had all suffered terribly from the late drought; some were deserted, and many in very bad condition; the average of inferior wells was very large; all the rates and data gave large reduction; I determined, therefore, to reduce here nearly 25 per cent. Having thus worked out my rates for each *chuk* and estate separately, I found that the total amount of relief given to the whole *purgunnah* would amount to 18 per cent. reduction of the original *jumma*, or about 13 per cent. on the present collections. It also became manifest that my proposed *jumma* would fall short of that given by the various rates and data above enumerated; for though these rates were in themselves very moderate, still they could not be acted on in estates which were nearly ruined or deserted, consequent on the present drought and total failure of the crops.

22.—I annex a tabular statement showing the fiscal results of my assessment in each *chuk* separately, and also for the whole *purgunnah*, and also giving for comparison the various *jummas* given by my various data for assessment:—

<i>Name of Chuk.</i>	<i>Produce Jumma.</i>	<i>Classified Well Jumma.</i>	<i>Average Well Jumma.</i>	<i>Yoke Jumma.</i>
<i>Khadir</i>	42,100	47,095	42,730	40,205
<i>Bangur</i>	17,372	17,158	15,840	18,158
<i>Adjoining Bar</i>	12,300	11,053	10,550	12,168
Total	71,772	75,306	69,120	71,531

<i>Doul Jumma.</i>	<i>Rate Jumma.</i>	<i>Summary Jumma.</i>	<i>Proposed Jumma.</i>	<i>Percentage of.</i>
42,856	43,450	50,614	41,080	18½
16,130	18,929	17,865	15,415	13
11,767	12,450	14,410	11,000	23½
70,753	74,831	82,889	67,495	18½

SETTLEMENT OFFICE,
Goojranwala. }

J. H. MORRIS,
Settlement Officer.

APPENDIX V.

Remarks on the Revised Settlement and Assessment of Purgunnah Shekoopoorah, Zillah Gujeránwála.

Purgunnah Shekoopoorah is the largest of all the four tehseels comprising the district of Goojranwala. It is situated in the south-east of the zillah, being bounded on the east by Purgunnah Shahdurah, and further down by the Ravee, on the south by Purgunnah Syndwallah, of Zillah Googairah, and the "Bar" of Zillah Jhung; on the west by Purgunnahs Hafizabad and Ramnuggur, and on the north by Purgunnah Goojranwala. In length it reaches some 70 miles, and in breadth from 30 to 40. Like Hafizabad, it comprises two distinct fiscal divisions, the "Des" and the "Bar," to the description of the former of which we will confine ourselves at present.

2.—There are in the "Des" 563 villages, of which some 153 are estates lying on the edge of the "Bar." The "Bar" being situated in the centre of the Doab, we find that those estates which are farthest north, or nearest the Ravee, are the least affected by its influence, and are, therefore, more strictly speaking "Des" villages, than those which lie farther in and nearer the centre or high land. In this purgunnah may be found every description of soil and agricultural produce. First comes the low alluvial land, a narrow fringe of luxuriant cultivation bordering on the Ravee, from which it receives natural irrigation. Further in we meet with land requiring artificial irrigation to render it productive, but still it benefits from its vicinity to the river with water near the surface. Then we come to land naturally watered by the "Deg nala," and still further in the "Bar" meets us. So much for the south of the purgunnah. In the north, bordering on the Goojranwala Purgunnah, we have a continuation of that well-known tract called the Churkuree Mehal, with its fine soil and superior wells; further down, and bordering on the Shadurah Purgunnah, we have the same characteristics of wells and irrigation, with an inferiority of soil; whilst still further in, and more towards the centre, traces of the "Bar," accompanied by signs of decreasing cultivation and larger pasturage areas everywhere meet us.

3.—The purgunnah is only traversed by one large stream, the Deg, which enters it at Khanpoor, and continuing a southerly course parallel to, and from 13 to 15 miles distant from, the river Ravee, leaves it again for Purgunnah Syndwallah at Khoonnee Burkhoordar, at the extreme south. The only other stream worthy of notice is one which takes its rise near Eminabad, in Purgunnah Goojranwala, and in favorable rainy seasons flows down through the north-east corner of this purgunnah as far as Shekoopoorah Khas, and even below. There are also the remains of a canal cut from Buddokee, in Purgunnah Goojranwala, down to Shekoopoorah Khas; it entered the purgunnah at the north-west corner near Chahee, and had a south-east course; it has, however, been dry for some years.

4.—The soils are of ordinary description. *Goera*, or highly manured, is to be met with in all estates, but more especially in the well irrigated tracts in the north and north-east, as also in some of the largest and most flourishing estates bordering on the river.

Rohee, found mostly in the villages situated near the Deg Nuddee; also in those estates which receive the waters of the Eminabad stream: there are also some fine patches to be met with in the vicinity and to the east of Shekoopoorah Khas.

Doshahee, common to the whole purgunnah: the best is found in the most highly irrigated tracts, and also in the river villages.

Myrah, of two kinds,—"*Bussar*" or "*Kumeera*," a good soil, equal and often superior to the best "*Doshahee*," and "*Dehor*" or "*Rukkur*," very poor, with a large admixture of sand;—the former is met within the villages bordering on the Goojranwala and Shahdurah Purgunnahs; the latter is common all over the purgunnah.

Tibba, or real sandy soil, is rarely met with.

5.—Produce and crops.—The staples are wheat and rice; the former is grown in great luxuriance on the irrigated land, and also in the alluvial soil of the Ravee; the latter in land naturally watered by the Deg or other streams. When the rains have been favorable, rice is found in all the low patches of "*Rohee*" soil; most wells also have their annual crop of rice. Sugarcane is not often met with except in the villages bordering on the Goojranwala Purgunnah, where the growth is of good quality. It is worthy of remark that there is none grown in the river villages bordering on the Ravee. The produce of cotton is uncertain; each well has its crop, but the chief supply is from the "*Barance*" lands of the "Bar" and its vicinity, where it is grown in great luxuriance after favorable rains. The return, however, being dependent on the rain, is an uncertain one. All the other ordinary crops are produced: they do not require particular notice. The cultivation is very fair, indeed may be called superior in those villages where the proprietors are Raiens, Lobanahs, and Hindoo Jats. It is almost entirely dependent on artificial irrigation, which is of the same description as that met with in Purgunnahs Goojranwala, Ramnuggur, and Hafizabad, and has been so fully described by me in my remarks on those tracts, that I need not here enter more into detail regarding it.

6.—Castes.—The following are the most worthy of notice:—

Raiens, found in considerable numbers in the river villages in the river vicinity of Shurrupoor, &c., are industrious and good cultivators.

Lobanahs, active and industrious, but quarrelsome and litigious.

Sundoo, Hindoo Jats, a large and influential tribe, who have settled in all the river estates in the south of the purgunnah, are an industrious race and good cultivators.

Virucks, Hindoo and Mussulman Jats, very numerous, more especially in the "Bar" and estates adjoining; fair cultivators, and by no means an idle race, but greatly addicted to cattle lifting.

Khurruls, Mussulman Jats, found in the south, on the banks of the "Deg," and in the "Bar," estates; an idle and troublesome race, bad cultivators and notorious thieves.

In the north, all the sub-divisions ("Goath") of the Jat tribe, as *Bhahel*, *Viraeesh*, *Doogul*, *Shekum*, *Dhotur*, *Mulhee*, &c., are to be met with. As a general rule they are industrious and fair cultivators.

7.—Of the past history of this purgunnah but little can be learnt. It remained for many years in the jageer of the Ranee Nikaeen, with whom the "Kun" system was in vogue. Money payments were unknown, and as to the records of the revenue realized under the Rance by the system of appraisement, they are not such as would prove useful in fixing assessment, even if reliance could be placed on them, which I much doubt.

8.—The summary settlement was made by Mr. A. Cocks in 1847, on returns given in by the former kardars, calculated on the average produce of the five years preceding. Although high, still on the whole it cannot be said to have worked badly. It has been generally collected without much difficulty in favorable and even ordinary years, though the extreme difficulty of the collections, and the amount of balance which occurred during the two years of scarcity, Sumbut 1906 and 1910, proved its severity, and showed that considerable reduction was necessary. Out of a jumma of rather less than Rs. 1,60,000 (one lack and sixty thousand), it was found necessary and expedient to remit the following sums:—Sumbut 1906, Rs. 12,800 or 8 per cent; Sumbut 1907, Rs. 5,600 or $3\frac{1}{2}$ per cent; Sumbut 1908, Rs. 4,000 or $2\frac{1}{2}$ per cent; Sumbut 1909, Rs. 5,600 or $3\frac{1}{2}$ per cent; and Sumbut 1910, Rs. 24,000 or 15 per cent. Another proof of the severity of the summary settlement is the number of wells which have been deserted since it was made; notwithstanding the large tuccavee advances, it appears that out of 4,000 wells at least 1,000, or a fourth, have fallen in during the last five years. Another circumstance worthy of notice, and which must have borne unfavorably on the working of the summary settlement, is that on the accession of the British rule, many of the zemindars, especially among *Virucks* and *Sundoos*, formerly serving in the *Seikh* army, lost their service and returned to their villages; the former proceeds from service, therefore, which used to go towards paying the Government revenue, were now no longer forthcoming.

9.—Data for assessment.—Past money payments there were none, nor had there been any system of administration such as might prove useful as a guide in fixing assessment: still, with the working of the summary settlement before me, my own personal knowledge of the condition of each estate, and the aid given by the kanoongoe, and others who had served several years under the Ranee, and were intimately acquainted with the capacities and resources of almost every estate and well in the purgunnah, I could not be at much difficulty in fixing rates, and determining the amount of reduction required. I had also at my disposal the rates already fixed, worked out, and tested in all the neighboring purgunnahs, in one or other of which were to be found every kind of soil to be met with in this; all I had therefore to do was to test and try these rates, and finally to adopt such as would enable me to bring the revised assessment of this tract down to an equality with that already fixed in the other purgunnah.

10.—Before however proceeding to notice these rates and data in detail, I will explain briefly how I divided off the purgunnah into topographical chuks or circles, first premising that these were formed entirely on local considerations of soil, produce, depth of water, &c.; whilst all minor points, such as caste, habits, condition, &c., were not taken into consideration here, but separately noticed in my Mouzehwar remarks.

11.—First, *Chuk Khadir*, containing 67 estates, embracing all the river villages with alluvial soil and water near the surface. The greater portion of the land is "Sylabee," and the staple produce wheat; the average depth of water from the surface being from 15 to 20 feet, wells are sunk without difficulty, and with but little expense. The "Sylabee" is generally of good quality, not much injured by sand. This chuk contains by far the best and finest estates in the purgunnah, amongst which may be mentioned, *Shurrukpoor*, *Bhaineen*, *Khoochoor*, *Faizpoor*, *Bhoochokee*, *Khace*, *Muddaran*, and *Asul*. The general condition of the villages is flourishing; but few really distressed estates are to be met with; whilst there are two or three notoriously under-assessed. A moderate reduction of 10 per cent. I considered would meet all the requirements of this tract.

12.—Secondly, *Chuk Bangur*, comprising 64 villages, those lying next to the *Khadir*. It is a narrow strip of land, running down parallel to and between the *Khadir* and *Deg* chuks. Soil,—"*Doshahee*" and "*Myrah*" of average quality. Crops and cultivation,—ordinary. Water still near the surface, about 25 feet. Wells built without great cost, but they are almost indispensable, the "*Baranee*" land being worth little or nothing. This tract does not contain any large estates; the majority are poor and over-assessed; and there is much distress consequent on the late drought. Reduction up to 20 per cent. appeared necessary.

13.—Thirdly, *Chuk Deg*, containing all the estates irrigated by or benefiting from the water of the *Deg*. The soil mostly good—"Rohee," the staples wheat and rice. The *Deg* takes its rise in the *Jummoo* hill, and is dependent on the rains for its supply of water, which is consequently very uncertain, and this uncertainty increases as we go southwards. The best villages are those to the north. This stream, after flowing down half-way through the purgunnah, divides off at *Odheree* into two branches, the upper called the *Deg*, and the lower the *Nangua*. The *Nangua* again branches off at *Mangtanulah* into two smaller streams,—the

Nangua and Satrang. The Deg has more water than the Nangua, and that more than the Satrang; but the whole stream has greatly deteriorated within the last 10 years. The Deg has water in it all the year round as far down as Rorah; after that it is dry, except in the rainy season. The irrigation is from "Jalars" fixed on the banks of the stream. In the north the irrigation is good and the villages in fair order, but in the south they are very poor; many are greatly over-assessed, and suffering much from the severe effects of the late drought. Large reduction, not less than 22 per cent. appeared advisable.

14.—Fourthly, *Chuk Churkuree Mehal*, comprising 48 villages lying to the north of the purgunnah, in the vicinity of Goojranwala and Rainnuggur. I have already, in my remarks on the assessment of those purgunnahs, so fully described the characteristics of this chuk, that I need not repeat them here. I found here considerable distress, severe over-assessment, and much poverty, consequent on the large number of cattle that had died during the drought. Reduction of not less than 20 per cent. seemed indispensable.

15.—Fifthly, *Chuk Mera*, containing 79 estates lying to the north-east and east, chiefly those bordering on Purgunnah Shahdurah. Soil—good "Myrah." A little sugarcane grown, all the other crops in abundance. Irrigation entirely from wells. "Baranee" land fair. Water at an average depth from 30 to 40 feet. Proprietors, however, generally poor, complaining loudly of over-assessment, and of their severe losses from the dire effects of the late drought. Large balances having accrued, considerable reduction up to 20 per cent. appeared absolutely necessary, with still further temporary relief for a couple of years.

16.—Sixthly, *Chuk adjoining Bar*, containing 153 estates, viz., all those situated between the preceding chuk and the villages of the "Bar." Here water is far from the surface, from 40 to 50 feet. Wells are sunk with difficulty and at considerable expense. The "Baranee" land is not worth much. None but the ordinary crops are grown. I did not, however, find here so much over-assessment or distress as in the two preceding chuks; but still, considering the difficulty of the collections, the balances, and the dire effects of the late drought, some 17 per cent. reduction appeared advisable.

17.—Having thus formed my chuks, I proceeded, with the aid of my statistics, local knowledge, and rates found applicable in other purgunnahs, to fix rates which would meet all the requirements of this tract. After much consideration I adopted the following:—

	<i>Chuk.</i>	<i>Sylabee.</i>	<i>Baranee.</i>	<i>Judeed.</i>	<i>Well.</i>	<i>Yoke.</i>
					Rs.	Rs.
Khadir	1-8-0	1-4-0	0-12-0	0-6-0		15
Bangur	1-8-0	...	0-8-0	0-4-0	36	12
Deg	1-8-0	1-0-0	0-8-0	0-4-0	45	14
Churkhuree Mehal	1-8-0	...	0-8-0	0-4-0	65	18
Mera	1-5-4	...	0-8-0	0-4-0	60	15
Adjoining Bar	1-2-0	...	0-8-0	0-4-0	50	12

which, when worked out, gave the necessary reduction, and seemed suited to the wants of this purgunnah.

18. The fiscal results are as follows:—

<i>Name of Chuk.</i>	<i>Produce Jumma.</i>	<i>Well Jumma.</i>	<i>Yoke Jumma.</i>
Khadir	40,364	.....	39,375
Bangur	10,246	10,152	10,260
Deg	16,986	16,115	16,796
Churkhuree Mehal	15,871	16,100	15,588
Mera	19,468	19,380	19,670
Adjoining Bar	30,789	31,042	30,375
TOTAL.	1,33,724	.....	1,31,564

<i>Rate Jumma.</i>	<i>Summary Jumma.</i>	<i>Proposed Jumma.</i>	<i>Percentage of reduction.</i>
41,305	42,602	39,425	8 per cent.
11,412	13,292	10,340	22 per cent.
16,801	20,906	16,285	22 per cent.
16,217	20,080	15,930	20 per cent.
20,490	23,666	19,430	20 per cent.
31,691	36,495	30,140	17 per cent.
1,37,916	1,37,041	1,31,550	16 per cent.

SETTLEMENT OFFICE,
Goojranwala. }

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Settlement Officer.

APPENDIX VI.

Remarks on the Revised Settlement and Assessment of the "Bar" Villages of Purgunnahs Shekoopoorah and Hafizabad, Zillah Gujeránwála.

The "Bar" is a belt of jungle which runs right athwart the Doab, from the Ravee to the Chenab. It is about 100 miles long, and 40 to 50 miles in average breadth. The lower boundary and border come within the District of Jhung, whilst the tract contained within the Goojranwala District includes 172 villages situated within the "Bar," and also on the skirts of the "Bar," that is, partly in the "Bar" and partly in the open country. They were formerly subdivided into several purgunnahs and talooquas; now they come within the two Tehseeldarces of Shekoopoorah and Hafizabad in the following proportions, Shekoopoorah 80, Hafizabad 92.

2.—The face of the country is sprinkled over with low jungle. It is not studded over with lofty trees, nor covered with thick brushwood. The trees are small and stunted, and do not grow close together. The brushwood also is clustered into separate clumps. The principal trees worthy of notice are—"the Jund," a small tree, does not grow to any height, but is much prized for firewood; the "Peloo" or "Vun," a larger tree, used also for fuel, bears an edible red berry; the "Furrash," a stately tree, the timber of which, however, is not of much use; and the "Khurreel," very common, but inferior in quality of wood, &c., to any of the preceding. The ground, moreover, is covered with thick strong high grass, excellent fodder for cattle. The soil is flat, even, consistent, and rich: it is, however, by no means uncommon to meet with extensive swamps, and patches of low land called "Rohee," growing a species of grass known as "Punnec," much prized by the graziers for their cattle. After favorable rains, water is found in these swamps for many months, and they always serve as a last refuge for the cattle in years of drought.

3.—Marks are everywhere to be seen which attest the fact that at some period this tract was inhabited and cultivated, such as village sites, broken wells, and ruined cities. The period at which the civilization became extinct it is not easy to determine; the name of Akbar, however, is well known to the inhabitants who reside there now. It is on all hands admitted that there was a race of proprietors who have passed away, and the present occupants are men of yesterday.

4.—The inhabitants belong to a variety of castes and tribes peculiar to this part of the country. The three tribes most worthy of notice are the *Bhuttees*, Mussulman (commonly known as "Bhugseeh" in the "Bar"), who have peopled and possess nearly all the "Bar" of Purgunnah Hafizabad; *Virucks*, mostly Hindoos, confined almost entirely to Purgunnah Shekoopoorah; and *Khurruls*, found in the lower portion of that purgunnah, but mostly in the Jhung and Googairah Districts. Their persons are generally tall and handsome; their habits are predatory and nomad; their subsistence chiefly depends on their cattle; their capacities as agriculturists have not been fully tried, but they do not evince a very industrious disposition, and are greatly addicted to cattle lifting. They have, however, considerably extended their scanty cultivation since the accession of our rule. Two main sources of their former livelihood are now either gone or going, *viz.*, theft and military service. Runjeet Sing employed large numbers. The two dry seasons of 1849 and 1850, following as they did a cycle of unpropitious years, made great havoc here, both amongst the crops and cattle. The cattle died by hundreds, and the stock has not yet recovered from the damage then sustained. The people are still somewhat depressed by their losses, of which they loudly complain, but on the whole they cannot be said to be otherwise than well off for their situation and habits in life. Traces of real poverty are very rare. Their cattle are cows, bullocks, buffaloes, sheep and goats; they are of tolerable breed, and in most excellent condition; their appearance testifies to the quantity and quality of their pasturage; they go out to graze at considerable distances; they are sometimes kept in separate pens and folds, but they are mostly brought home to the village at eventide. There are some camels belonging to the villagers, but they are few when compared with the vast herds belonging to Belooch owners, who carry on the firewood and timber trade with Lahore.

5.—The cultivation is chiefly dependent on wells; there is, however, considerable unirrigated cultivation, but the returns are very uncertain, being dependent on the periodical rains. They consist almost entirely of autumn crops, as cotton, joar, churree, moth, and other pulses. Towards the eastern extremity, near the bank of the Deg Nuddee, rice is produced in some abundance and of fair quality. In the irrigated lands the spring crops take up the greater portion. The wheat is fine; inferior vegetables are grown. Turnips are produced largely to feed the cattle. In the Khurreef "sugarcane is not grown, but the mukkhlee" produced is good. There is no "Dofuslee" land. There is so far a rotation of crops, that the land is sown one year with spring crops, next year with autumn, and so on. The soil is hard and dry, and water is very far from the surface. A pukka well costs from 300 to 400 rupees.

6.—The native rulers worthy of notice are Dewan Sawun Mull on the tracts round Hafizabad; and Raneer Nikacen in the tracts round Shekoopoorah. Both administrators are considered to have been good and mild. Under the "Raneer" the "Kun" system was entirely in vogue, estates being subdivided for purposes of collection into wells, and the produce of each well calculated separately. With the "Dewan" also appraisement of the crops was by no means uncommon; but usually each well was separately assessed at money rates, varying according to the nature of the soil, condition of well, depth of water, &c. New wells were assessed very lightly, and large "inams," varying from one-third to one-sixth, were granted as an encour-

agement to others to increase their cultivation and settle down. The majority of these "inams" were upheld in the summary settlement, and have been confirmed under the present. Amongst the items levied in addition to the regular land tax, the only one requiring notice is the "trinnee." This important impost was a tax on grazing; it was computed on the cattle assumed to be on the estate, or rather to belong to the village, by a rate table applicable to one head of cattle of each description. The zemindars then engaged for the amount so fixed. The camels were counted, and the "trinnee" due from them recalculated annually, the influx of camels being very uncertain. But with domestic and agricultural cattle the annual process was not considered necessary. It was thought enough to recalculate once every 3 or 4 years. All "trinnee" was levied "Mouzehwar," and the taxpayer paid his "trinnee" together with the revenue of the village in which he happened to be residing; regard was had to residence, and not to the place of pasturage.

7.—The summary settlement was made by Mr. A. Cocks in the year 1847, that is under the Resident's regency. It was generally moderate, calculated chiefly on the receipts of previous years, which having been years of scarcity, were fair criteria. The cultivated land only was taxed in Purgunnah Shekoopoorah; nothing was demanded an account of "trinnee." In Purgunnah Hafizabad, however, "trinnee" was levied, and formed part of the summary jumma. In this purgunnah, however, large "inams" were granted, which was not the case in Purgunnah Shekoopoorah; the result was, therefore, that the Government demand on the two purgunnahs was nearly equal, though the nominal distribution was different. Regarding the jummas, it must be remarked, that though generally fair for the cultivation, yet that they were not by any means equitable, if taken to represent the aggregate amount of taxation which each estate can bear. Large estates, well populated and depending on their heads of cattle, are taxed less than many smaller villages, because the large village has fewer wells than the small one. This arises from considerations of "trinnee" having been omitted. Among the members of the community, there are four methods of distributing the revenue,—*firstly*, actual possession; *secondly*, wells; *thirdly*, the amount of water taken for irrigation; *fourthly*, pairs of plough oxen. In those estates where "trinnee" was not levied, and the jumma assessed on the cultivation only, the cultivating families nominally pay it. In reality, however, the whole community subscribe, but they think it prudent that the cultivators only should pay ostensibly, in order that the whole resources of the village may seem to be comprised in a few wells or cultivated fields.

8.—We will now proceed to the consideration of those lands which have no regular occupants. Who is the proprietor of the uncultivated? By universal admission the Government. Beyond the land actually under cultivation and occupation there is no such thing as a boundary which can be denoted by anything like a land-mark. There is no line upon which the cattle may graze, and beyond which they must not wander. They may stray or be driven in any direction. The villagers sometimes point to a deserted site, where they or their ancestors formerly lived, or to a ruined well, and say that the boundary at least extends to that limit. Again, most of the villagers have a number of colonies scattered round them; now the whole community, that is colonies and mother country, would claim all the intermediate waste land that lay between the village and the several hamlets. But these vague pretensions can none of them furnish data for the demarcation of boundaries, and the villagers all allow that the waste land belongs to the State, with this reservation, that they consider they have some right to as much land as may be required for their cattle to graze upon. The custom regarding the "trinnee" illustrates the utter absence of a boundary. It would appear natural that the camel owner should pay "trinnee" to the estate within which the camels had grazed. But no, they pay to the village in which they happened to be residing, although the camels may never have come near that village. This shows that the people consider the jungle adjacent to a particular village as no more belonging to that village than to any other. Those villages which lie on the jungle frontier, that is, are situated half in and half out of it, cannot point out a boundary on the jungle side, though they can do so readily enough on the other sides: they usually manifest a strong spirit of encroachment.

9.—But there is a vast amount of land, undoubtedly the property of the State, upon which the Government may eventually induce cultivators to settle. The interest of the State dictates that the property should be properly defined. Until it is so marked out, we cannot offer a proprietary right to settlers. Until such rights are offered, we cannot expect them to colonize. It is no less for the good of the inhabitants and occupants at present located there, that the limits of their property should be fixed, and their tenure declared. They will thus be taught to value their lands, and to cherish a native feeling for their homes: they will be secure in their occupation, and claim their just manorial dues.

10.—The first step was then to prepare statistics of all these villages. An accurate enumeration of all the cattle was impossible. The people had the will and the means of effectually concealing them. Enquiry however furnished a rough estimate of sufficient accuracy; men, houses and wells were counted. The aspect of the occupants and of their tenements revealed at a glance the character of the village, and its capacity for enlargement or improvements. The considerations, when all taken together, at once showed how much land the village could beneficially occupy. An allotment of so much land immediately round the village was accordingly made, and marked off with boundary pillars, generally allowing 4 to 5 acres to each head of cattle. But this rule admitted of certain qualifications and reservations. Where villages pointed to an ancestral site now ruined ("The") or to a broken well ("Dull") or to a sheepfold, or to any other marks, and begged that their boundary might be extended up to that point, such representations were listened to, and doubtful points construed in favor

of the people, their lands being allotted them on liberal principles. Places which they themselves or their fathers had occupied were, if possible, included within their new boundary, it being important to keep up old associations and make the people feel an affection for the soil. In villages lying on the edge of the "Bar," permission was given to the people themselves to adjudicate the counterminous boundaries, but undue encroachments on the "Bar" were zealously guarded against. Care was also taken that land capable of being turned to good account should not remain idle in the hands of parties who had no substantial claim.

11.—The boundary having been fixed, the field measurement did not give much trouble. It was carried on by what is now known as the "zemindaree" system. The people only measured the scanty patches of cultivation; the remaining area was ascertained from the professional survey. For the assessment, indeed, no field measurement was necessary, for no jumma at present could attain to more than approximate accuracy. It was fixed with reference to the number and strength of the families, the number and the quality of the wells, and the quantity of cattle, all which things could of course be ascertained without a land measurement. But the measurement was of use in the distribution of shares, and will serve hereafter as an excellent standard by which to ascertain the increase of cultivation. In some villages, where there is no cultivation, no measurement, except the professional, was required for the grazing lands. In framing the assessment, the question of "triunee" was decided. As before stated, in the Hafizabad Tehseeldaree it had been virtually included in the summary jumma at the time of assessment, but in the Tehseeldaree of Shekoopoorah no "triunee" whatever was fixed; the reason of this omission is not very clear. However, the revival of this impost as a direct tax did not appear to me admissible; it is apt to become vexatious, and is opposed to our general principles of revenue. I did not therefore revive it, but substituted for it a fair tax on the waste and jungle lands, fixed in the manner above described, and included in the regular jumma.

12.—So much for general principles of assessment. I will now proceed to state more in detail how the new jummas were fixed, when reduction was granted, &c. The only assessment data procurable were the "Kun" papers of the Shekoopoorah portion, and the fixed money assessment on wells and yokes which obtained under Sawun Mull for the Hafizabad Tehseel. The former were not of much use in guiding assessment; the latter were more so. Under Sawun Mull it was ruled that a good well with its full complement of yokes, *i.e.* 6, *pucka* or 9 *Kutchas*, could pay Rs. 62, or if the assessment was made on yokes, the rate was Rs. 10 per yoke. From the above rates the amount of "inain" granted to the proprietors was deducted, which varied according to circumstances, and in different localities: thus among the "Bhugsees" $\frac{1}{3}$ "jumma" was very common, which brought the jumma of a well down to Rs. 40; the "Loodeekas" generally got $\frac{1}{4}$ "jummas," and the other castes one-fifth and one-sixth. Here then were fixed rates most useful as a guide in fixing assessments. Again, for "Baranee" land the known rate was Re. 1 per acre, calculated on a measurement of the land after the crop had ripened, and deductions made for crops destroyed ("nabood"), or that used for fodder ("cheraee"). The grazing dues, also fixed at so much per head of cattle of each kind, were as follows:—camels Rs. 2, buffaloes Re. 1, cows 8 annas, sheep and goats 1 anna. In addition to these fixed data, the statistics of each estate were accurately ascertained—the number of wells and yokes; the amount of cultivated land, irrigated and unirrigated; the area available for pasturage; the number of cattle; the population, with details of houses and families, as well as all the available resources, as old wells, low marshes, thick forest, &c.

13.—The summary settlement has also been noticed: though unequal, still at the time it was made it was considered generally fair. Since then, however, it had been severely tried by two droughts, one in *Sumbut* 1906, at its commencement, and the other in *Sumbut* 1910, at its close. In both these years balances had accrued,—in the latter year amounting to Rs. 4,000, or 10 per cent. of the collections. In ordinary seasons also, collections had not been easy, and yearly remissions had been found necessary. Another proof of the severity of the assessment during the last year or two, was the fact of a large number of wells, some 200 or more, having fallen in and been deserted in consequence of the inability of the proprietors to rebuild or repair them. Reduction, therefore, seemed absolutely required, and it only now remained to determine the amount needed, and its manner of distribution.

14.—For this purpose then I proceeded to examine carefully my data of assessment, and all the statistics of each estate. Sawun Mull's rates for a well and yoke, respectively, were Rs. 62 and 10: these were rates higher than what had been adopted by me in tracts superior to this, and I consequently felt myself justified in going below them, and adopting the following:—Rs. 47 per well, and Rs. 9 per yoke. For rates on cultivation, the following seemed light—Chabee, 1-0-0, Bar 0-4-0, Judeed 0-2-0. As to the cattle, I came to the conclusion that it would not be advisable to tax them at more than Rs. 10 per cent all round. With these rates then, aided by a good Tehseeldar, and my own personal knowledge of the condition, peculiarities and capacities of each estate, I fixed on a jumma for each. The sum total of jummas thus obtained I compared with that of the summary settlement, and found a decrease of about Rs. 8,000, or rather more than 20 per cent. reduction, which appeared very fair, and not more than was required to meet the exigencies of this tract. This done, I then took my statistics of houses, population, and total area for the whole tract, and comparing them with the total new jumma thus determined on, I deduced the following rates:—Rs. 2 per house, 11 annas per man, and $1\frac{1}{2}$ annas per acre, with which, by an inverse operation, I again tested the jumma of each estate, and corrected all discrepancies. As a general guide, and also to show at a glance what jumma a village ought to pay according to a calculation made on all its statistics, I have introduced into my assessment statement an

average jumma calculated at a fixed rate on the following statistics,—viz., a well, yoke, and house; a man, one acre of land, and head of cattle.

15.—The fiscal results of my settlement are as follows :—

<i>Name of Purgunnah.</i>	<i>Average Jumma.</i>	<i>Rate Jumma.</i>
Hafizabad	15,784	16,096
Shekoopoorah	15,176	14,383
Total	30,960	30,479

<i>Summary Jumma.</i>	<i>Proposed Jumma.</i>	<i>Percentage of Reductions.</i>
19,621	15,592	20 per cent.
18,822	14,762	21 per cent.
38,443	30,354	20 per cent nearly.

16.—I also annex a statement showing in detail all the statistics of the two "Bar" tracts of Hafizabad and Shekoopoorah. This may prove interesting, and from it I have obtained the following results :

Percentage of irrigation to cultivation	...	...	...	...	...	...	=58
Ditto of "Baranee" to ditto	...	...	...	...	...	...	=26
Ditto of "Judeed" to ditto	...	...	...	...	...	...	=16
Ditto of cultivation to total area	...	...	...	...	...	...	=11
Ditto of fit for cultivation to ditto	...	...	...	...	...	...	=4
Ditto of pasturage land to ditto	...	...	...	...	...	...	=85
No. of acres (cultivated) to each man	...	...	...	...	...	...	=1
No. of ditto (total area) to ditto	...	...	...	...	...	...	=9
No. of cattle to ditto	...	...	...	...	...	...	=1½
No. of acres (pasturage) to each head of cattle	...	...	...	...	...	...	=6
No. of acres (total) to each house	...	...	...	...	...	...	=27
No. of men to each house	...	...	...	...	...	...	=3
No. of cattle to each house	...	...	...	...	...	...	=4

I am of opinion that the number of cattle are greatly under-estimated : at a rough guess I should say they ought to be doubled, thus bringing up the average to 8 head of cattle per house, and giving 3 acres of pasturage to each head of cattle.

17.—In conclusion, I must state that the foregoing remarks and statistics only apply to that portion of the "Bar" which is inhabited, and has been accordingly allotted to the people who reside in it. There still remains a large tract of country, comprising a superficial area of 212 square miles, the property of Government, where at present no one resides, with the exception of a few wandering and nomad tribes, but which is very valuable for the pasturage it contains, and the timber it yields. The manner in which this tract has been divided off into a certain number of chuks or blocks, and the arrangement proposed for the future preservation of the grass and timber, having been only lately reported on at length by me in my letter No. 87, dated 14th June 1856, a repetition of the same appears unnecessary here.

18.—I should not also omit to mention, that for the foregoing remarks, giving a description of the "Bar" and its inhabitants, I am greatly indebted to Mr. Temple's valuable "Memo." on the allotment system in the "Bar."

APPENDIX VII.

THE annexed statement will show the principal castes to be met with in this district; they have been arranged in numerical order according to mehals, each caste found preponderating in more than 5 mehals being separately specified. I will now proceed to notice more particularly the principal of them.

2.—*Viruck*, a "goath" of the Jats, chiefly Hindoo, a few Mussulman. The founder of this tribe came from Jummo many centuries ago: he first settled in the Sealkote District, and then moved downwards towards Shekoopoorah. Many of this clan are Seikhs, and were formerly in service. They possess 190 villages in the Tehseels of Goojranwala, Hafizabad and Surrukpoor, chiefly in the vicinity of Shekoopoorah.

3.—*Cheemah*, a clan of the Jats, almost all Mussulman. Raee, the founder, came here some 500 years ago, and settled in Tulwundee Raeevalah. Amongst the most famous of the tribe may be mentioned *Dhoone* and *Vunee*, *Bhas* and *Char*; they founded many large and flourishing villages, as Sarooke, Dilawar, Budokee, Bankee, Cheemah, &c. They possess 111 estates, chiefly within the Tehseel of Wuzeerabad, and in the vicinity of that town.

4.—*Bhuttee*, a clan of the Rajpoots, entirely Mussulman. The founder, Dhervee, came from Bhutneer in the Puttialah territory, and settled in the Jullunder Doab in the imperial times. One of his descendants, Furreed, about 200 years ago, migrated thence to Pindee, on the banks of the Chenab, where he settled, and which becoming the head-quarters of the tribe was called "Pindee Bhutteean." They possess 106 villages, chiefly in the Hafizabad and Surrukpoor Tehseels.

5.—*Sundoo*, a "goath" of Hindoo Jats. They came to the Punjab about 300 years ago; were originally in service. The first of the ancestors who took to the plough was Ookoo. They settled on the banks of the Ravee, where they founded many large and flourishing estates, as Khodpoor, Bhoochokee, Hurdo Khaee, Asul, &c. In this district 90 villages belong to them, to be met with chiefly in the Surrukpoor Tehseel, and the river villages of Choonean.

6.—*Chutteh*, said to have been formerly Chouhan Rajpoots, now class as a "goath" of the Jats, entirely Mussulman. Dheroo, the founder of the tribe, came from Dchli some 500 years ago, and settled in Nidalah Khan, in the Ramnuggur Purgunnah, whence his descendants spread over the country. They were once a very powerful tribe, but their power and influence were greatly reduced by Runjet Singh. They now possess 78 villages, chiefly in the vicinity of Ramnuggur, in the two Tehseels of Wuzeerabad and Hafizabad. The old Purgunnah of Ramnuggur was in the imperial times known by the name of the "Purgunnah Chuttoh Cheemah," from the great preponderance of these two clans in it.

7.—*Tarur*, a "goath" of the Jats, entirely Mussulman. This is a powerful tribe, came originally from Bhutneer in the imperial times, and settled on the banks of the Chenab, chiefly in the Hafizabad Purgunnah. Of the founders of this tribe those most worthy of notice are Kolo, Ghokul and Rutta. They possess in this district 77 estates.

8.—*Raeen*. This tribe, which is entirely Mussulman, migrated to the Punjab about 150 years ago. They first settled at Ferozpoor, and thence moved towards Lahore and Mooltan. They are to be chiefly found on the banks of the Ravee in the Surrukpoor Tehseel. They are commonly known as the Multanee Raeens, and possess 67 villages.

9.—*Rajpoot*: almost entirely Mussulman, migrated from the north to this part of the country more than a century ago. The tribe is subdivided into various clans; possess 51 villages, chiefly in the Surrukpoor Tehseel, and the river villages of the Lahore Tehseel.

10.—*Khuttree* are to be met with as landed proprietors in almost all the large towns and qusbahs. They possess 48 villages in this district, and have obtained proprietary possession, either by right of purchase, or from having sunk wells and first brought the land under cultivation. Entirely Hindoos.

11.—*Khurrul*. This tribe came from the vicinity of Multan about 100 years ago: they are to be found chiefly in the Shekoopoorah "Bar" villages, on the banks, or in the vicinity of the Deg Nuddee. They possess 44 villages. Entirely Mussulman.

12.—*Lobanah*. This tribe came from Lucknow in the reign of Muhammad Shah, and settled on the banks of the Ravee, as well as in the vicinity of the Deg Nuddee, where they founded several flourishing estates. They possess 43 villages, almost entirely in the Shurrupoor Tehseel or the river villages of Lahore. Exclusively Hindoo.

13.—*Viraeesh*: chiefly Hindoo, a few Mussulman only. "Dhooddee," the founder, came from Ghuznee to this part of country about 400 years ago. The tribe is a powerful one; have founded 43 villages in this district, in the Tehseels of Goojranwala and Wuzeerabad, but chiefly in the vicinity of Goojranwala Khas.

14.—*Hijrah*—one of the aboriginal tribes of this part of the country,—were settled here centuries ago, when more than half the district was peopled by them. Have gradually been becoming extinct, so that at present they only possess 43 villages, chiefly in the Tehseels of Goojranwala and Hafizabad. Both Hindoo and Mussulman.

15.—*Syud* about 8 generations back migrated to this district from that of Shahpoor. They are to be found in all the tehseels, but chiefly met with in that of Hafizabad. Possess 34 villages.

16.—*Loodeka*, a clan of the Khurrul tribe, who migrated with their cattle in the direction of Pindee Bhutteean, and settled chiefly in the Bar villages of the Hafizabad Tehseel. Entirely Mussulman. Possess 33 villages.

17.—*Gorayar*: both Hindoo and Mussulman. Rana, the founder, came from the hills, and settled here in the imperial times. They are chiefly to be met with in the vicinity of Goojranwala Khas: some few estates also belong to them in the Hafizabad Tehseel. Possess 30 villages.

18.—*Gondul*, a Mussulman tribe, partly Rajpoot and partly Jat, who migrated with their ancestor, Murad, to this district from that of Shahpoor: are to be found chiefly on the banks of the Chenab in the Hafizabad Tehseel. Possess altogether 24 villages.

19.—*Bhugseen*: a clan of the Bhuttee tribe, who settled in the "Bar" about 50 years ago. Possess 15 villages in the Hafizabad Tehseel, chiefly in the Pindee Ilaua.

20.—*Sansee*, a goath of the Jats, entirely Hindoo, chiefly Seikhs; famous on account of the Seikh men, Runjeet Sing being a member of this clan. Possess 12 villages in the immediate vicinity of Goojranwala Khas.

21.—*Ghoomun*. The founder of this tribe, Ghoomun, first came from Mullheeana, and settled at Jummo; thence migrated to the Punjab. The tribe possess only 7 estates in this

district. The following goaths, all of which are to be found in this district as landed proprietors, have, however, sprung from them: Tatlee, Dhoodhee, Gogla and Dhundasee.

22.—*Khokhura*, a clan of Fakeers who settled about 100 years ago in the Hafzabad Purgunnah, and founded several estates on the banks of the Chenab. They possess altogether 7 villages, of which the principal is Behhek Ahmudiyar, a large and flourishing estate.

23.—In addition to the foregoing, the following clans are also worthy of notice. *Dhilloo*, with 24 villages, scattered over all the Tehseels. *Khokhur*, 21 estates, chiefly in the Hafzabad and Surrukpoor Tehseels. *Gill*, 19 villages, several of the finest on the banks of the Ravee. *Chundur*, 17 estates, chiefly "Bar" villages. *Sheikum*, 15 villages, principally in the former Purgunnah of Ramnuggur. *Mulhee*, 13 estates, chiefly in the vicinity of Shekoopoorah. *Baoree*, with 15 villages, mostly in the Hafzabad and Surrukpoor Tehseels: this is one of the aboriginal tribes of the district, to which may be added Jug, Sumrah, and Model.

24.—With respect to the remaining clans not hitherto particularized, all the necessary information can be learnt from the statistical statement appended.



APPENDIX

Statement showing, in Averages and Percentages, Details of Soil, Cultivation, Population, with Shur-

NAME OF TEHSEEL.	Percentage of irrigated on cultivated area.	Percentage of unirrigated on cultivated area.	Percentage of lately abandoned on cultivated area.	Percentage of cultivated on mal-goozaree area.	Percentage of cultivable on mal-goozaree area.	Percentage of cultivated on total area.	Percentage of cultivable on total area.	Percentage of lakheraj on total area.	Percentage of barren on total area.	Percentage of land cultivated by proprietors.	Percentage of land cultivated by hereditary cultivators.	Percentage of land cultivated by tenants-at-will.	Percentage of agriculturists to total population.	Percentage of non-agriculturalists to total population.
Goojranwallah	71	16	13	63	37	42	23	4	31	67	13	20	36	64
Wazecrabad ...	75	13	12	78	22	41	12	6	41	65	15	20	37	63
Hafizabad ...	68	17	15	15	40	17	17	1	65	62	23	15	42	58
Grand total of Zillah Goojranwallah,	73	15	12	62	33	28	18	3	51	65	17	18	38	62
Shurrupore, ...	70	8	22	46	54	19	22	1	58	70	10	20	44	56
Lahore villages ...	84	10	6	73	24	58	18	3	21	83	9	8	44	56
Chooneean villages,	85	5	10	69	31	52	23	3	22	50	26	24	43	57

IX.

Holdings, and Revenue Liabilities in the Tehseels of Zillah Goojranwallah, rukpore, &c.

Average number of acres (cultivated) to each agriculturist.	Average number of acres (malgoosaree) to each agriculturist.	Average number of acres (total) to each agriculturist.	Average number of acres (cultivated) to each person.	Average number of acres (malgoosaree) to each person.	Average number of acres (total) to each person.	Average number of acres (cultivated) to each plough.	Average number of acres (malgoosaree) to each plough.	Number of persons to each square mile of 640 statute acres.	Average amount of Juma paid by each proprietor (malgoosar) excluding women and children.	Average amount of Juma paid by each agriculturist, including women and children.	Average amount of Juma paid by each person, including women and children.	Acre rate of proposed Juma on cultivated area.	Acre rate of proposed Juma on malgoosaree area.	Acre rate of proposed Juma on total area.	Percentage of reduction on former Juma (khalsa).
3.46	5.41	8.21	1.25	1.95	2.96	14	21	215	16-8-2	3-15-0	1-6-9	1-2-2	0-11-7	0-7-8	18½
2.11	2.79	5.34	.79	1.03	1.98	10	13	327	17-2-5	3-1-3	1-2-2	1-6-7	1-2-1	0-9-3	16½
2.84	5.65	10.42	1.21	2.38	6.94	15	30	92	14-3-4	2-5-9	1-1-2	0-14-3	0-7-2	0-2-5	19½
2.25	4.65	10	1.08	1.45	3.82	13	21	167	15-0-2	3-3-2	1-3-8	1-2-0	0-11-0	0-5-1	18½
2.41	5.18	12.52	1.05	2.25	5.45	11	24	116	14-12-7	2-12-2	1-3-3	1-2-0	0-9-1	0-3-6	19½
2.28	3	3.96	1.02	1.34	1.75	9	12	366	12-11-8	3-6-8	1-8-9	1-8-0	1-2-3	0-13-10	1½
3.24	4.19	5.5	1.4	1.8	2.38	16	20	269	17-12-10	3-2-10	1-5-10	1-1-7	0-12-1	0-9-2	0

J. H. MORRIS,

Settlement Officer.

Statement showing the Percentages of Irrigation, Soil and Produce, together with the Rates with Shur-

NAME OF TEHSIL.	Total area.	Deduct minabes fit for cultivation, lately abandoned, and maafee.	Actual cultivated area.	Percentage of Chahce.	Percentage of Syiabce.	Percentage of Barance.	Percentage of Dofusice.	Percentage of first class soil.	Percentage of sugarcane.
Goojranwallah ...	485,374	307,188	178,186	81·	52	18·48	51	12·75	2·25
Wazerabad ...	287,576	179,204	108,672	81·	10·41	8·	52	16·50	3·
Hafizabad ...	923,836	786,510	137,326	68·17	11·32	20·61	33	14	2·
Total, Zillah Goojrawallah,	1,697,086	1,272,902	424,184	76·91	6·57	16·52	45	15	3·42
Shurukpoor ...	572,416	486,018	86,398	80·25	9·37	10·38	3·08	8·4	35
Lahore villages ...	41,027	7,890	33,137	33·39	56·24	10·37	3·5	6·93	23
Choonean ...	60,540	41,050	19,490	41·18	52·94	5·88	47	5·35	13

D I X X.

of the summary and proposed Juma, for the Tehseels of Zillah Goojranwalah, rukpore, &c.

Percentage of cotton.	Percentage of garden produce.	Percentage of wheat.	Percentage of barley.	Percentage of rice.	Summary Juma.	Proposed Juma.	Rate of summary Juma on actual cultivation, excluding lately abandoned.	Rate of proposed Juma on actual cultivation, excluding lately abandoned.	Increase.	Decrease.
3.66	1.45	26.24	12.72	3.67	2,91,578	2,32,781	1 10 2	1 4 10	...	58,797
4.52	1.17	37.15	10.	2.15	2,01,567	1,67,645	1 15 1	1 8 8	...	33,922
5.13	1.09	30.82	7.95	1.28	1,76,405	1,42,937	1 4 6	1 0 8	...	33,468
4.43	1.23	30.64	10.67	2.56	6,69,550	5,43,363	1 9 3	1 4 6	...	1,26,187
2.74	1.89	.12	19.87	4.07	1,53,986	1,26,373	1 12 6	1 7 4	...	27,613
1.27	.46	50.91	13.	.37	53,184	52,690	1 9 7	1 9 5	...	494
1.92	.64	32.	14.42	.46	23,020	23,605	1 2 10	1 3 4	585	...

J. H. MORRIS,
Settlement Officer.

Statement showing the statistics of Chuk, Bar, &c.

Name of Pergunnah.	Chahco.	Barance.	Judeed.	Total cultivation.	Mafee.	Fit for cultivation.	Barance waste.	Total area.	No. of wells.	No. of yokes.	Population.	Houses.	Cattle.	Average Juma.	Rate Juma.	Summary Juma.	Proposed Juma.
Hafzabad ...	14,856	3,463	3,002	21,321	288	8,734	159,286	189,620	293 K., 3 M., 200 Br.	1,396 K. 3 M.	18,256	7,643	22,343	15,784	16,096	19,612 12 9	15,592
Shekoopoorah...	9,634	7,399	3,558	20,591	1,477	6,093	868,220	196,382	236 K., 80 M., 223 Br.	1,865 K. 4 M.	23,883	6,466	34,583	15,176	14,383	18,822 2 0	14,762
Total ...	24,490	10,862	6,560	41,912	1,765	14,827	327,506	386,010	529 K., 22 M., 423 Br.	2,561 K. 123 Br.	42,139	14,109	56,926	30,960	30,479	38,443 14 9	30,354

SETTLEMENT OFFICE,

Goojranwallah.

J. H. MORRIS,

Settlement Officer.

Statistical (Meharwar) Statement of castes of the Goojranwala Settlement, Rule arranged numerically.

Name of Tehseel or District.	1										2										3										4										5										6										7										8										9										10										11										12										13										14										15										16										17										18										19										20										21										22										23										24										25										26										27										28										29										30										31										32										33										34										35										36										37										38										39										40										41										42										43										44										45										46										47										48										49									
	Viruck.	Cheemaah.	Bhutee.	Bandoo.	Chutkeel.	Taaur.	Raaseen.	Raupoor.	Khattree.	Kharrul.	Lobanaah.	Viraechee.	Hirrah.	Synd.	Lodekah.	(Goorayah.)	Gondal.	Khokhur.	Gill.	Chundbur.	Dolo.	Bhugseen.	Sheikun.	Baaree.	Mulhee.	Sadsee.	Dhotur.	Awan.	Onleek.	Siprah.	Khorasee.	Sarasee.	Thahul.	Bhoon.	Daber.	Booltur.	Bhindur.	Kokharah.	Brahmin.	Ghoomun.	Dhoochee.	Mogul.	Tutteeh.	Kulor.	Mutlah.	Misceellaneous.	Government property.																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Goojranwala	86	21	5	18	5	3	3	131	...	8	34	11	2	...	10	8	2	2	4	2	...	14	2	13	12	6	...	9	1	...	10	3	...	7	6	...	2	2	...	5	2	90	5	454																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Wuzeera bad	...	89	1	53	3	4	2	4	2	...	9	2	7	3	1	1	1	1	2	1	...	3	5	...	1	...	4	3	45	4	261																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Hafzabad	39	1	70	520	59	0	...	9	5	25	17	33	11	3	19	6	2	10	5	10	...	6	...	5	6	1	2	1	...	1	8	5	1	1	7	1	1	1	1	86	52	546																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Total of Zillah Goojranwala	125	111	76	287	63	13	3	44	7	8	43	26	33	30	14	22	8	10	12	6	10	14	9	13	12	12	6	11	5	1	10	4	8	5	8	8	7	6	7	...	2	6	4	221	61	1,261																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Sharnkpoor	65	...	27	43	...	12	36	33	3	33	25	...	5	7	...	11	2	9	2	5	5	5	1	4	5	...	5	9	...	5	...	2	1	...	5	4	11	10	385																																																																																																																																																																																																																																																																																																																																																																																																																																																												
River villages of Lahore	7	...	18	15	1	...	10	...	1	2	1	1	2	23	81																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Do. of Choonean	3	15	4	2	7	...	5	2	35																																																																																																																																																																																																																																																																																																																																																																																																																																																											
GRAND TOTAL	190	111	106	90	78	77	67	51	48	44	43	43	34	33	30	25	24	21	19	17	16	15	15	15	13	12	12	12	11	10	10	10	9	8	8	8	8	7	7	5	6	6	6	255	71	1,762																																																																																																																																																																																																																																																																																																																																																																																																																																																												

No. 319, dated Lahore, the 5th March 1860

From—R. H. D. Esq., Secretary to Government, Punjab

To—The Offg. Financial Commissioner, Punjab

In reply to your letter No. 141, dated 10th ultimo, I am directed to convey the sanction of the Hon'ble the Lieutenant-Governor to the settlement of the Goojranwala District, as therein solicited.

2. The report of the Settlement Officer, together with the subsequent correspondence relating thereto, is to be printed and published.

3. The Lieutenant-Governor considers Mr. J. Morris, under whose immediate superintendence the settlement of this district was made, entitled to praise for energy and ability. The services of his Assistant, Lieutenant Elphinstone, and Extra Assistants Mehtab Singh and Faizul Hossain also call for the acknowledgments of Government. Lastly, His Honor's thanks are to be communicated to the Commissioner, Mr. Cust, for the care employed in revising the assessment, and to Mr. Temple (under whose orders the settlement was commenced) for his able review of the proceedings.

The original enclosures are herewith returned.



Map OF THE RAWUL PINDEE District

REFERENCES

Villages over 1000 Houses **B W H**

Rail: Delhi 500 M **•••••**

" " 250 " **•••••**

Mountain Range **—**

Isolated Hills **•••••**

Large Rivers **—**

Smaller Water Courses **—**

Rivers **—**

Canals **—**

Fort, or Fort **•**

Police Roads **—**

Catch **—**

Tribal Boundary **—**

ATTOCK

Adjoining Districts **KOHAT**

Villages over 200 Houses **Mithal**

" " 500 **Boshta**

" " 1000 **Thutta**

Triquet Boundary **—**

Attock	1
Banda	2
Unkhi Pura	3
Rawal Pindi	4
Sargodha	5
Sargodha	6
Koror	7
Mughal	8
Phoolgiri	9
Khurra	10
Dawal	1
Charikan	2
Kotli	3
Kurer	4
Jugum	1
Kurrai	2
Kahroo	3
Kahota	4
Kallar	5
Mirralter	1
Bendi	2
Deree	3
Gooliana	4
Sookhe	5
Luselo	1
Sirkaneo	2
Hurre	3
Sirmala	4
Killa	5
Dilla	1
Fulch Juna	2
Agum	3
Solan	4
Kote	5
Sel	1
Kharada	2
Mokkai	3
Jundal	4

